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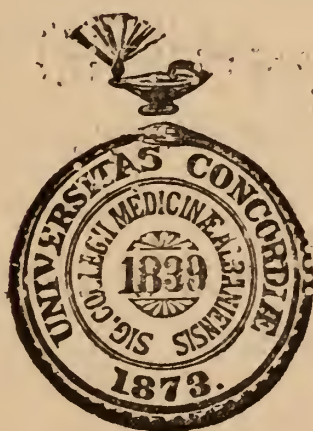
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ALBANY MEDICAL ANNALS

Journal of the Alumni Association of the
Albany Medical College

VOLUME XXII

Ἀσφαλὲς καὶ ἔμπεδον ἔστω τὸ σὸν ἔδος. Ἐκ σκότου μὲν ἔξαγε
φάος, ἐκ δὲ πάθους ἀναψυχὴν



ALBANY, N. Y.

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ALBANY MEDICAL ANNALS

Original Communications

ON THE INFLUENCE OF A HOSPITAL UPON THE MEDICAL PROFESSION OF A COMMUNITY.*

By WILLIAM OSLER, M. D.

Well nigh four hundred years ago in his wonderful book that wonderful man, Sir Thomas More, on "The New Yle Utopia," draws the following picture of the care of the sick in the Commonwealth:

"But first and chieflie of all, respect is had to the sycke, that be cured in the hospitalles. For in the circuite of the citie, a litle without the walles, they have iiii. hospitalles, so bigge so wdye. so ample, and so large, that they may seme iiii. litle townes, which were devised of that bignes partely to thintent the sycke, be they never so many in numbre, shuld not lye to thronge or strayte, and therefore uneasely and incommodiously: and partely that they which were taken and holden with contagious diseases, suche as be wonte by infection to crepe from one to another, myght be layde apart farre from the company of the residue. These hospitalles be so wel appointed, and with al thinges necessary to health so furnished, and more over so diligent attendance through the continual presence of cunning phisitians is geven, that though no man be sent thether against his will, yet notwithstandinge there is no sicke persone in all the citie, that had not rather lye there, then at home in his owne house."

*An address delivered at the Celebration of the Semi-Centenary of the Troy Hospital, Troy, N. Y., November 28, 1900.

During the past half century we have been making rapid strides towards the realization of this ideal. The conglomeration which we call society is built upon a tripod—the school-house, the hospital and the jail, which minister respectively to the manners, the maladies and the morals of man. With the school-house we are not here concerned, nor with the jail particularly, though the relation of the public to the sick in body who frequent our hospitals, is not without a bearing upon the sick in morals, for whom we build our jails. The time is not so far off when bodily disease was regarded as a judgment of God upon sin, as Cotton Mather put it, “*flagellum Dei pro peccatis mundi*,” the rod of God for the sins of the world; and the day is not so very far distant when an equally great change will take place in our views of moral disease, when the punitive aspect with which society now regards the jail will yield to the educational, and when, in addition to reformatories for the curable, we shall have permanent homes for the incurable in morals, as we have for our incurable in maladies, and when we shall feel for the former as we now do for the latter, pity, not resentment.

The benign influences of a hospital flow in many channels and in an educated community have a value which cannot be overestimated. Through it the people at large may be educated in the great principles of charity in these days so ill-understood and so often perverted. One of the greatest of these is that the sick and suffering shall be relieved in a spirit of good will, and with the best means at man's command. The good will stamps the genuineness of the article, whether it be a cup of cold water, or the gift of a Croesus. The problem of the poor is so intricately mingled with others of equal difficulty as to be almost insoluble. Not so the problem of the sick poor, which charity answers with a smile, with outstretched hands, and words of welcome on her lips. To be the purveyors, the dispensers of this bounty is a most precious privilege, not appreciated at its true worth in these days of toil and stress, and yet if there be a commandment with promise it relates to care of the sick poor. There was no discrimination in the charity of the good Samaritan, who stopped not to ask the stripped and wounded man by

the wayside whether it was of his own fault the ill had come, nor of his religion, nor had he the wherewithal to pay his board. From the standard set in that memorable story we cannot afford to deviate in the slightest, since it represents the broad charity of humanity, of that brotherly love in which alone the law is fulfilled. It is a great pity that in the administration of this Christ-like gift we have, in this country, linked sectarian names with anything so sacred. While I know that in Episcopal, Methodist Episcopal, Baptist, Presbyterian and other denominational hospitals, much indiscriminate charity is practiced, naturally preference must be given in them to sufferers who are "of the household of faith" which the institution professes. In nothing should the citizens of a town take greater pride than in a well established, comfortable Hotel Dieu—God's Hostelry—in which his poor are healed. And it should be to them a personal care. There is to-day far too much of the second hand charity of the ten or fifty dollar subscription. Let me paraphrase the well known words in which Milton describes the man who consigns his religion to the care of his parson. It is equally applicable to the man who consigns his charity to the Secretary of a Hospital Board: "A wealthy man, addicted to his pleasure and to his profits, finds 'charity' to be a traffic so entangled, and of so many peddling accounts, that of all mysteries he cannot skill to keep a stock going upon that trade. What should he do? Fain he would have the names to be 'charitable,' fain he would bear up with his neighbors in that. What does he, therefore, but resolve to give over toiling, and to find himself out some factor to whose care and credit he may commit the whole managing of his 'charitable' affairs some man of note and estimation that must be. To this he adheres, resigns the whole warehouse of his charity, with all the locks and keys, into his custody." "The simple dispensation of money to be converted into virtue by the piety of other men" is as the crumbs which fell from the rich man's table ample for Lazarus, and most acceptable, but of no avail to save Dives.

About the hospital centres all that is best and highest in the profession of medicine. In it, not in the medical school proper, not in laboratories, not in museums, we doctors live

and move and have our being. Conjure up the names of the great ones in our ranks, and a large majority have been men whose life work has been in hospitals. Particularly is this the case since the revival of learning. Harvey at St. Bartholomew's, Hunter at St. George's, Laennec at la Charité, Bright at Guy's, Skoda at the Allgemeines Krankenhaus, Lister at the Royal Infirmary, recur to one's mind in a hasty survey of the past. And herein lies one of the great glories of a hospital—that it may be a centre from which priceless blessings are showered on the race. Think of what the few brief years of Laennec's life gave to the world through studies made in the dismal wards of an overcrowded Paris Hospital. The practical good done to the patients who came under his care during that period, precious as it was to them, and fulfilling, as it did, the essential work of the institution, is a trifle of immeasurable insignificance in comparison with the incalculable benefits which have flowed to generations of patients as a direct result of his immortal work. The Trustees and Managers should ever bear in mind this double function of a hospital, which was well expressed in Mr. Johns Hopkins' will, when he stated that he wished one of the institutions which bear his name to be for the care of the sick, and for the study of disease. It was never better expressed than by that great surgeon, John Hunter, in a letter to the subscribers to St. George's Hospital in 1793, the year of his death: "My motive was in the first place to serve the hospital, and in the second to diffuse the knowledge of the art, that all might be partakers of it; this, indeed, is the highest office in which a surgeon can be employed; for when considered as a man qualified only to dress a sore or perform a common operation, and perhaps not all of those that may be reckoned common, he cannot be esteemed an ornament to his profession. The governors will consider how far a numerous class of pupils increases the reputation of the hospital; they will consider whether those numbers do not produce the secondary good arising from an hospital, which is the effectual diffusion of knowledge, and, if so, whether every surgeon should not be in duty bound to contribute his share towards this good purpose."

In the minds of the Trustees of certain Hospitals there

prevails a stupid and most erroneous notion that the presence of students is prejudicial to the interests of the patient. It is just the reverse. A class of intelligent young men, or a group of clinical clerks in the wards is a stimulus to the attending physician, a great help to the house-officers, and an unmixed blessing to the patients, whose cases are more carefully studied, the diagnosis in obscure disorders are more frequently made, and a successful issue more frequently reached. In cities of this size, which have no medical schools, every encouragement should be offered to students during the summer months to see the practice of the hospital, and to reap the benefit of the instruction of the men on the staff. I would go further and say that no hospital can be said to fulfil its mission which is not a centre for the instruction of students or doctors.

The attitude of the profession to the general hospital of the community is influenced by several circumstances. There is a wide-spread feeling, strongly emphasized in this State, that the charity of many hospitals is abused by persons who could pay, and pay well, for the services of a doctor at home. Undoubtedly this is the case, and the greatest care should be exercised that only deserving persons should receive aid. The question arises, who is a deserving person? We are all agreed upon the poor man, but how about the relatively poor, the clerk or mechanic with a large family? Many conditions arise in which he is a worthy recipient of hospital aid. A daughter with typhoid fever, or a boy with hip-joint disease is much better off in the wards of a hospital than at home, and it is a good deal better for the profession that the father of the family should pay the hospital two or three dollars a week for the care of his child than that he should take food from the mouths of his little ones to pay a doctor's bill, which at the best could not be in any degree adequate to the services rendered. Take the cases, too, which need special services—the obscure skin disease, obstinate affections of the nervous system, cases requiring delicate operations; a majority of these have already paid a general practitioner a fair fee before applying to hospital. Instead of saying that our charities are abused by such people, I maintain that they are not used enough, and are not sufficiently taken advantage

of by the general practitioners. The golden rule in the practice of medicine makes the interest of the patient the first consideration, and so soon as the physician is puzzled, or finds the case to be obscure, or not progressing well, instead of straining a family in straitened circumstances—distraining, I would call it—by a consultant's fee, he should send the patient to a hospital. If the patient can pay something for the accommodation well and good, if not well and good; to help such is the truest form of charity. I am not speaking, remember, of the absolutely poor, but of the relatively poor and the improvident, upon whom sickness comes as a terrible trial. In relieving these people of their obligations to the profession by placing them in more skilful hands, or where the nursing is better, the physician only does his duty, though it may be at a pecuniary loss. How beautifully Sir Thomas Browne puts this: "Let me be sick myself if sometimes the malady of my patient be not a disease unto me. I desire rather to cure his infirmities than my own necessities. Where I do him no good methinks it is scarce honest gain; though I confess it is but the worthy salary of our well intended endeavours."

In no relation is the profession touched most closely than in the selection of men to serve in the Hospital Staff. Need I say that this is often a source of worry and annoyance? How many have been the heartburnings and disappointments in connection with this institution during the past fifty years! The difficulty is that which Lincoln felt, and which he expressed so graphically when a horde of hungry applicants sought sustenance of a maternal government. The polythelia was not equal to the piglets. Doctors are sensitive fellows, 'gey hard' to get along with, and in no relation more than in that of which I am speaking. There would be no trouble if the place always sought the man, but you know well how it is—a dozen men seek the berth, and on the day of the election eleven feel sore. I do not know, but I sincerely hope that in this hospital the appointments are made by a small board, without that canvass of an enormous constituency which is so humiliating to the applicants. The contributors should have faith enough in the Board of Governors or in the Committee of Management to entrust to them the

selection of a staff. The profession has a deep interest in having the very best in its ranks engaged in charitable and scientific work. It is the wider experience which a hospital physician or surgeon obtains which makes him of value to his brethren and to the public in doubtful and serious cases. With the extra responsibility and additional work comes, as a rule, compensatory extension of influence and reputation. There are two avenues to success in practice; the one a broad and much travelled road, the *via publica*, smooth and easy, well paved, without ruts, along which the average doctor can jog along behind common-sense (medical) and civility, by far the best team of their kind; the other, the *via medica*, a straight and narrow way, but very rough, along which many start, full of life, driving, not a team, but science, in single harness. With careful driving, with patience, with perseverance, a few reach the Delectable Mountains of wide professional confidence; many more turn off early into the easier avenue which leads to success through the public. There is no question as to which road the hospital physicians should travel. Occasionally one meets a doctor who leads a dual life, travelling both roads, on good terms with the public, and at the same time devoted to science and gaining a strong reputation among his colleagues. You have such a man in Troy.

Once on the staff, how shall a man conduct himself? If he is not a student of his profession let him resign after the briefest possible term of service. In too many good hospitals there are lazy rascals whose interest never extends beyond perfunctory visits to the wards, and the writing of a prescription or two. Let the physician make the best of existing conditions. Some of the greatest clinicians have had wretched facilities in very small wards. The little farm well tilled is the most profitable. One cause of discouragement is the wholly inadequate aid offered in their work. A couple of house-officers are expected to look after 150 beds, whereas in any service of acute medical or surgical cases there should be one house-physician or surgeon to twenty-five or thirty beds. The house staff should be graded; there should be seniors and juniors, so that the time of the attending physician is not entirely occupied in training a green hand. This

is a much needed change in many of our large general hospitals, in which the house-staff has not kept pace in numbers with the extraordinary increase in the duties expected of him. Another cause of despondency is lack of familiarity with modern methods. A graduate of five or ten years standing is just a little stale unless he has kept in touch with a hospital, or has taken post graduate instruction. He lacks often these technical acquisitions which are so necessary in the wards. To-day methods make the art of medicine. Now to any one who feels a bit weak in this way the remedy is easy. Let him get off to a good school and learn the methods. Six weeks this year, and three months next year will supply what he lacks, and in plenty of places he can get exactly what he wants. A hospital service is a trust in which the profession dry nurses men so that they may be helpful to their colleagues and to the public. Time should be no consideration. Persevered in intelligently a couple of hours a day spent in studying cases is a capital investment for a man, one of the best I know. The clinician who keeps one eye on his watch while in the wards is rarely successful. A student he must be in the best sense of the term, studying the nature of disease, the best means for its recognition, and the safest means for its cure. To keep abreast of the times in any subject is hard enough in these days, but it is still harder to get a grip of subjects historically, in which way alone can the true perspective be obtained. Yet this should be the object of the true student. After ten or fifteen years what a rock of defence such a man may become to his colleagues in times of doubt and distress. Moderate intelligence, energy and pertinacity are the essentials, to which, as a leaven, must be added urbanity and a kindly feeling towards his fellow workers.

For a physician to discuss the qualifications of a hospital surgeon would be audacious, though, after all, surgery is only one of the divisions—a large one, I grant—of general medicine, and, unless a mere mechanic, a surgeon must be a good physician. There is no essential difference in their training. The surgeon grows more rapidly than the physician, matures earlier, but rarely lasts so long. He may be ready to be dislocated by a younger man at an age when his

medical colleague is pleurably ripe. To train up a group of good surgeons, general and special, is one of the great functions of an institution such as this.

To heal the sick and to study disease are the two objects of a hospital, and while the members of the staff at large can do much to promote the latter duty, they can do much more with a competent pathologist, and a well equipped laboratory. Indeed the department of pathology should be coordinate with those of medicine and of surgery. It costs money, but it is money well invested in the interest of the patients and of the staff. Nowadays there is so much to be done in connection with the routine of the wards which requires the consultation of an expert bacteriologist and pathologist, that the best work cannot be done without his aid. Speaking from our experience no one event has contributed more to the welfare of the Johns Hopkins Hospital, to its reputation, to the smoothness with which the routine has proceeded than the thorough organization of the department of pathology under Dr. Welch. So intimately is this department connected with those of medicine, surgery and gynaecology that from it alone you can judge of the standing of the others. The pathologist should be a well paid officer of the institution, every encouragement should be extended to him to follow out researches, and he should have a resident medical officer under his own control. You have appreciated highly, I know, the good work of your pathologist, whose influence has not been confined to the institutions with which he is associated. In supporting a first class man to be a standard of reference on questions of pathology and bacteriology a hospital can benefit the entire profession of a community and at the same time be of uncalculable service to the public.

On one other point I may speak plainly as one of the few salaried attending physicians to a hospital in this country. Look over the organization of our great corporations—the Railways, the Warehouses, the Insurance Offices, the Universities and Colleges—and you will everywhere find the work to be done upon the good old principle—“the laborer is worthy of his hire.” But when we turn to hospitals we see an enormous staff of men, who ungrudgingly year by year devote their time and energies to the service of these institu-

tions "without money and without price;" men, too, who have risen to the very highest distinction and whose hours are bank notes, and who often devote to the poor time which should be given to refreshment and recreation. Think of the long years of gratuitous service which the late Austin Flint of Buffalo, in Louisville, in New Orleans and in New York gave to the hospitals of those cities; Da Costa, of whom we have been bereft so lately, a hospital physician, assiduous and devoted for long years, whom death found "on duty;" Weir Mitchell, still in harness at the Infirmary for Nervous Diseases, still glad to give freely of the treasures of his ripe and unique experience to whomsoever needs them. To-morrow morning in some hundreds of institutions, from the General Hospital, Winnepeg, in the north, to the Charity Hospital in the south, from the General Hospital in Halifax, to the Cooper College Hospital in San Francisco, the public has a band of servants doing some of the best work of the world, not on business principles. I do not ask that doctors should always be paid for their services; there are many hospitals in which it would be impossible, but there are wealthy corporations, which should not ask, particularly of young men, long and arduous duties without remuneration. Hospitals might fitly recognize this enormous debt by more frequently placing a physician on the Committee of Management, or on the Board of Trustees. Fortunately the medical profession can never be wholly given over to commercialism, and perhaps this work of which we do so much, and for which we get so little—often not even thanks—is the best leaven against its corroding influence. While doctors continue to practice medicine with their hearts as well as with their heads, so long will there be a heavy balance in their favor in the Bank of Heaven—not a balance against which we cannot draw for bread and butter, or taxes, or house-rent, but without which we should feel poor indeed.

In the attitude of the public towards hospitals a remarkable change has taken place; on the part of the poor a deeper conviction that in them their sick are faithfully and lovingly tendered; on the part of the rich a growing belief that in their quiet and seclusion the patient has a better chance of recovery than in the most luxurious home. What is this but

a fulfillment of the beautiful prophecy of Sir Thomas More? Were he here to-day I think he would say "that through the continual presence of cunning phisitians this Hospital has gained such confidence with the public that though no man be sent hither against his will, yet notwithstanding there is no sick person in all the city that had not rather lie here than in his own home."

ADDRESS :

HISTORICAL SKETCH OF THE TROY HOSPITAL— 1850-1900.*

By C. E. NICHOLS, M. D.,

President of the Medical and Surgical Staff.

Right Rev. Bishop, Mr. Chairman and Gentlemen of the Medical Profession: The fiftieth anniversary of the Troy hospital is an occasion which justifies congratulations. As president of the medical and surgical staff, I take pleasure in congratulating my colleagues on this golden jubilee. I congratulate also the citizens of Troy on the continued existence, growth and prosperity of an institution which, while it has shared in their benefactions, has given them a full return in the cure of disease and in the alleviation of suffering. The Troy hospital has honored the city whose name it bears.

The need for a hospital in Troy was convincingly shown in 1845. A party of immigrants who had arrived in the city were stricken with ship fever. To isolate and care for these sufferers the city was compelled to erect temporary buildings. Rev. Peter Havermans, the good priest who founded so many of the charitable institutions of Troy, ministered to many of the fever sufferers. Impressed with what he saw, he began the collection of funds for a new hospital, and a site was obtained on the southwest corner of Washington and Fifth streets. The corner stone of the building was laid by General John E. Wool, a distinguished soldier of the United States, August 15, 1848, and two years later, in 1850, the building was completed. The Sisters of Charity were given the charge of the new hospital, and the supervision of its affairs has continued ever since to be exercised by that untiring and self-sacrificing community. The hospital was incorporated in 1851.

*Delivered at the celebration of the semi-centenary of the Troy Hospital, Troy, N. Y., November 28, 1900.

In 1866 the hospital had outgrown the facilities afforded by its location, and the elevated and advantageous site now occupied on Eighth street, at the head of Fulton, was purchased. Right Rev. J. J. Conroy, Bishop of Albany, laid the corner stone of the new edifice June 28, 1868, and in the fall of 1869 the old building was abandoned and the new one occupied.

In 1896 the hospital building was enlarged by a commodious annex, which has greatly increased the capacity for effective work. The annex contains, besides the private rooms and wards, a well appointed operating room, with sterilizing room, lavatory and etherization rooms.

With each advance made by the hospital in its buildings and location came a corresponding enlargement in its medical and surgical activity. Soon after the completion of the new hospital in 1869 the number of attending physicians was increased, and separate medical and surgical departments were created. In 1872 the number of medical attendants was four.

Steady progress was made in each department, and in 1894 a training school for nurses, with a course covering three years, was established, and the department of gynecology was created. The year 1896 was an important one in the history of the hospital. Beside the addition of the new annex, the work of the hospital was systematized and facilitated by the establishment of separate departments of medicine, surgery, gynecology, pathology, laryngology, otology, neurology, ophthalmology and toxicology. Each department was given a chief and assistants.

The out-patient department was reorganized in 1898 with six sub-departments, all of which give free treatment to the deserving poor.

During the last year the orthopedic department has been created, as well as a dermatological department.

There are thirty physicians now connected with the hospital as heads of departments or as assistants. As president of the staff I take this opportunity to express my sincere appreciation of the fidelity and ability with which they perform the work of the various departments.

The hospital is well equipped in wards, private rooms, operating rooms, facilities for sterilization, laboratories, lavatories and laundry and culinary arrangements. There are separate wards for women and children. Each ward has its own bath room, with

modern plumbing, walls of Tennessee marble and tile flooring. A private operating room is floored and wainscoted with tiles and has marble sinks and nickel plated plumbing. There is a separate room with X-ray apparatus. The pathological and bacteriological laboratory is well arranged. Among noticeable features of the hospital are electric lights, electric bells, a bedside table for every patient, metal ceilings, tinted walls, hardwood floors, gas ranges, steam wash boilers and cold storage facilities.

The Troy hospital has cared for 21,500 house patients, and this does not include the great number who have sought the relief and advice of the clinic. The eye and ear department was established in 1872, and in that department alone 17,000 patients have been treated. This means about 85,000 treatments in that department. The number of operations for the removal of cataract has been 125.

Those who are living of the hospital staff of the fifty years may testify for themselves in the work which they are doing day by day but they are building on the foundation laid by those who ceased from their labors and have entered into eternal rest. Let us recall the memories of the honored dead. The first Troy hospital had for its medical staff Dr. James Thorn, at one time mayor of Troy, who was physician and surgeon; Dr. Matthew H. Burton, resident physician, and later Dr. William S. Cooper, who became one of the medical attendants. On the completion of the new hospital Dr. Leroy McLean was placed in charge of the surgical department, and he remained in that position until his death in 1897. Drs. Cooper and Wentworth took charge of the medical division. No words that I could utter would be excessive in praise of Dr. Leroy McLean and his devotion to the Troy hospital. Though he has passed from our sight, the hospital itself is to a large degree a living monument to his skill and his loyalty. Others who served the Troy hospital in a professional capacity, and who are deceased, were Drs. Robinson, Catlin, J. W. Moore, O'Connor and Donovan.

For the lives of such men we may look back with gratitude. In the spirit of their lives let us of the medical and surgical staff of to-day go forward, determined and expecting that the coming years of the Troy hospital shall be worthy of the half century now closed, and that the Greater Troy shall recognize as one of its most beneficent and esteemed institutions a greater Troy hospital.

FURTHER NOTES ON ABNORMALITIES OF THE
URINARY SYSTEM.

By GEORGE BLUMER, M. D.,

Director of the Bender Hygienic Laboratory.

In the *Johns Hopkins Hospital Bulletin* for September-October, 1896, the writer reported two unusual cases of ureteral abnormalities. Since that time a number of abnormalities of the urinary system have been observed which seem unusual enough to merit description. The following are the notes on these cases:

Case 1. Dystopia of the kidney. The case was an accidental find in an autopsy made on a male subject of twenty-five at the Troy Hospital. The following is the description of the kidney:

The left kidney is in its normal position.

The right kidney is not present in its normal position, but lies to the left of the median line resting on the antero-lateral surfaces of the second and third lumbar vertebræ. The organ rests upon the portion which corresponds to the convexity under normal circumstances. In this case, however, the convexity is flattened, in fact slightly concave, so as to adjust itself to the curves of the vertebræ. The concave surface is traversed in an oblique direction by a single deep groove, which begins on the left side of the organ at its middle and passes obliquely downward and to the right, terminating just before it reaches the right border at a point two centimetres above the lower end of the organ. On the anterior surface of the organ this groove runs in the same direction; that is to say, downward and to the right, terminating at the hilum. The surface of the organ presenting anteriorly is occupied in the center by the hilum. Immediately to the right of the pelvis, which springs as usual from the hilum, is a small island of kidney tissue almost quadrilateral in shape, bounded internally by the hilum, and above and below by two deep grooves which extend to the right from the hilum, each of them a distance of two and one-half centimetres. This island measures two by two centimetres.

The ureter extends as usual from the apex of the pelvis—in this instance passing directly downward over the center of the sacral promontory and ending normally in its usual position.

The blood vessels had unfortunately been cut off during the removal of other organs, so that their points of origin could not be determined. The renal artery enters the organ on its left lateral face just above the furrow previously described. The renal vein takes its origin by means of two branches which run in the two furrows to the right of the median line, described in connection with the small island of kidney tissue. These two vessels unite to form one large vessel shortly after leaving the furrows. On section the structure of the organ appears normal.

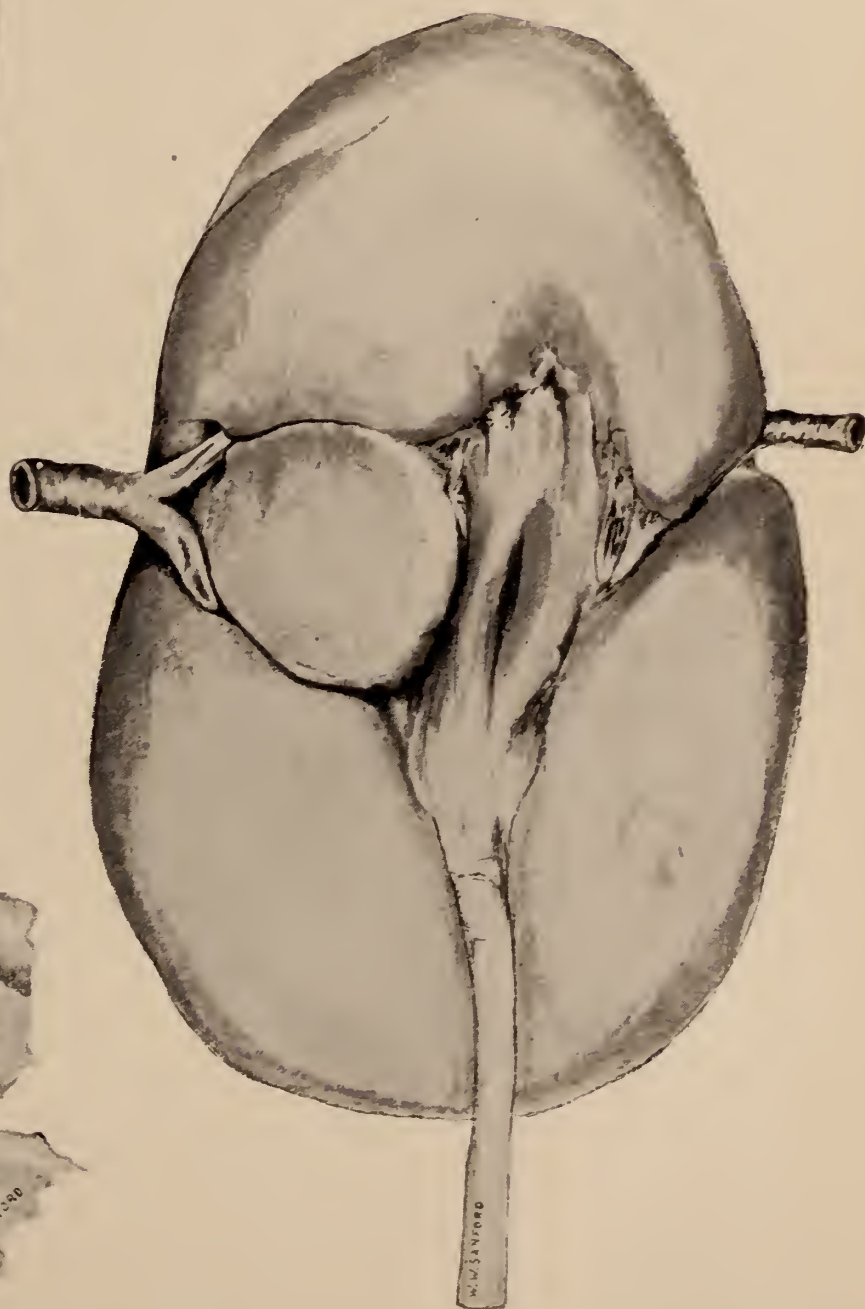
To Illustrate Dr. Blumer's Article, "Further Notes on Abnormalities of the Urinary System."

Albany Medical Annals, January, 1901.



CASE 5.

Duplication of the Ureter. The lines x, x, are drawn to the orifices of the ureters. Natural size.



CASE 1.

Dystopia of the Kidney. Interior view, showing arrangement of ureter and vessels. Natural size.

Misplaced kidneys in this position are rare and usually interesting only as pathological curiosities. They may, however, be of clinical import, as disease may attack them, and they may be discovered during an examination and mistaken for tumors. These cases are congenital in origin and entirely different from the ordinary floating kidney. The literature on this subject, especially that referring to the clinical import of such cases, is extensively reviewed in a paper by Hochenegg (*Wiener klinische Wochenschrift*, January 4, 1900.)

Case 2. This case presents the combination of kinking of the ureter with partial obstruction both of the upper and lower ends with enormous hydronephrosis. The case occurred in a male of forty who died of uræmia. The following is the description of the kidney and ureter:

The left kidney occupies the entire left flank from the diaphragm to the pelvic brim, and from the lateral abdominal wall to the spinal column. The organ measures 23 x 10 x 11 c. m. It has the general shape of the kidney, but is only the shell of the organ filled with a slightly, cloudy urinous fluid. The distended organ is markedly lobulated, the lobulations seemingly corresponding in distribution to the fetal lobulations so commonly seen. The lobules are separated from one another by depressed areas. The capsule of the organ is easily stripped off. The pelvis is much dilated, forming a pyriform bulging, which projects from the hilum and measures four and one-half centimetres in diameter at its base. Immediately below the pelvis there is a distinct narrowing of the lumen of the ureter, but below this the ureter is much dilated averaging about fourteen millimetres in diameter from this point down to the bladder. Six centimetres below the point of emergence of the ureter from the pelvis there is a distinct "S"-shaped kink—the three divisions of the letter "S," each measuring two centimetres in length. This kinking does not completely obstruct the outflow of urine and is apparently due to the presence of adhesions which run most of them at right angles to the long axis of the ureter. The lower end of the ureter shows marked thickening of its walls, the result of the presence of dense, fibrous tissue. Its lumen at this point is much narrowed, but an absolute obstruction to the outflow of urine exists at no point.

A description of the case is mainly interesting in showing a variety of lesions in the same ureter; first, a narrowing of the ureter just below the pelvis, presumably congenital in origin; below this an "S"-shaped kink in all probability due to the contraction of adhesions, and finally incomplete obstruction at the lower end of the ureter from a chronic inflammatory process. These conditions have been described separately with a moderate degree of frequency, but the combination is unusual, and it is interesting to note that with the three partial stoppages complete occlusion of the ureter had not occurred.

Cases three and four illustrate occlusion of the ureter with subsequent secondary changes in the kidney.

Case 3. This case occurred in a male about forty-five and showed the right ureter ending in a blind sac and marked hydronephrosis of the right kidney. The following is the description:

The right kidney measures $7 \times 3 \times 3$ c. m. The pelvis is enormously dilated, measuring $7\frac{1}{2} \times 4 \times 4\frac{1}{2}$ c. m., and the dilation extends from the pelvis through the entire length of the right ureter. On opening the right kidney, it and the pelvis are found to be dilated with slightly cloudy urine. Hardly any kidney substance exists in some places on account of the extreme distension. The shell of the kidney averages four millimetres in thickness. The capsule strips off fairly easily, leaving a coarsely granular pale surface. On section the cortex markings and the glomeruli can neither of them be made out. The medullary portion of the organ has almost entirely disappeared. The ureter can be traced down with an unobstructed lumen until it reaches the bladder. The lower half is about twice as widely dilated as is the upper half. Just at the point where the organ should enter the bladder it terminates in a blind sac.

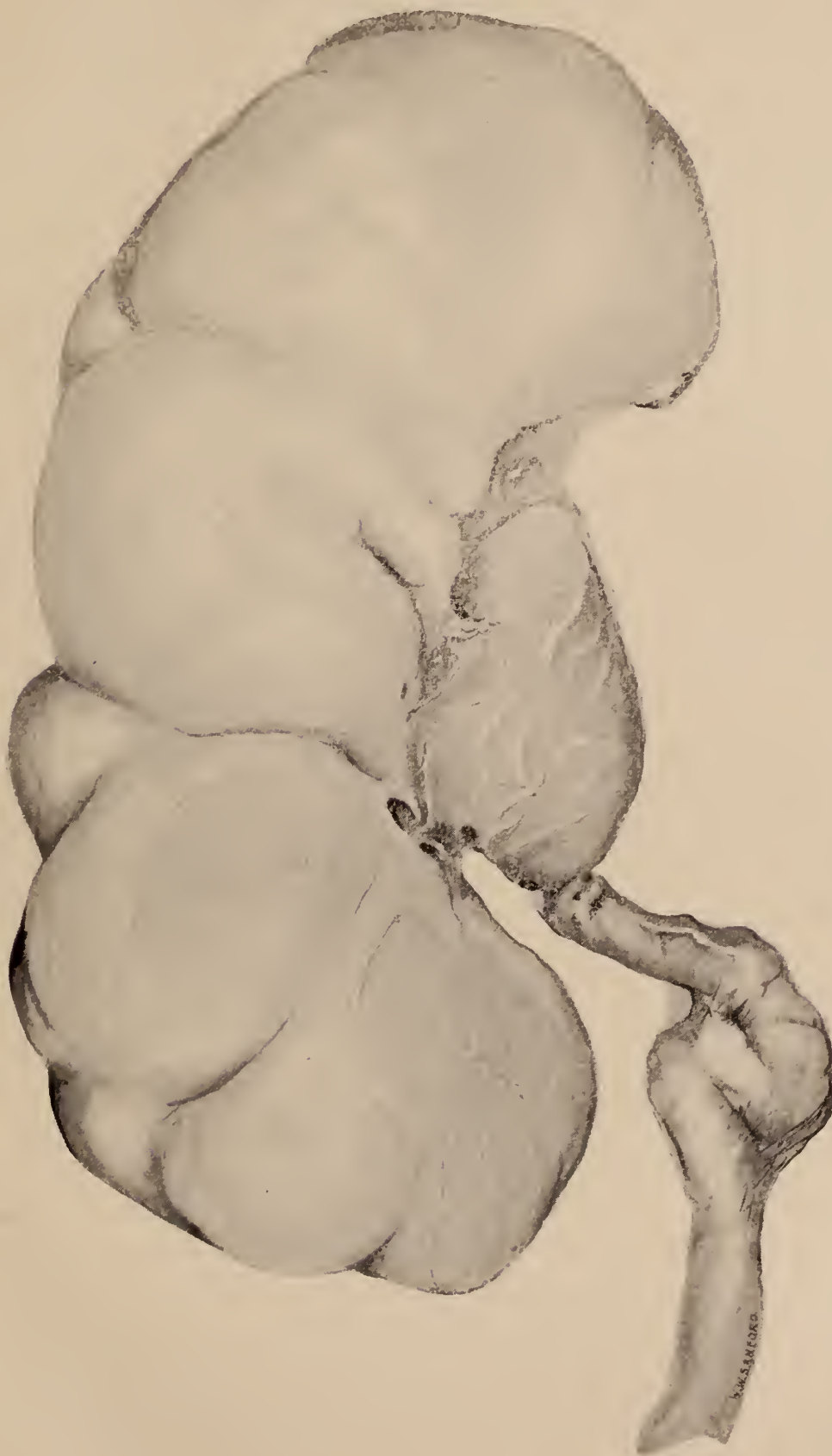
Case 4 was found in a man, aged fifty, who died of arterio-sclerosis. The lesion in this case involved the left side, and consisted in the complete obliteration of the ureter. The description of kidneys and ureters is as follows:

The kidney measures $7\frac{1}{2} \times 3\frac{1}{2} \times 3$ c. m. The surface is very rough, nodular, and occupied by several cystic cavities one-half to one centimetres in diameter. On section the remains of the kidney substance are riddled with cystic cavities. Kidney markings are entirely absent. Kidney tissue is reduced almost to nothing, being nowhere more than six millimetres in thickness. The pelvis of the kidney is occupied by large masses of fat which seem to have replaced all the pyramids. There is complete obliteration of the ureter on this side, this organ being represented by a fibrous cord.

It will be seen that in both these cases the kidney was in a condition of hydronephrosis. In some of the reported cases of obliteration of the ureter the kidney is completely atrophic and shows no signs of having been distended. Tangl (*Virchow's Archiv*, Bd. 118) believes that there is a complete atrophy of the kidney if the closure of the ureter has always been complete, whilst if it is incomplete at first a condition of hydronephrosis occurs. These cases may be due either to a congenital occlusion of the ureter or to an acquired occlusion from some inflammatory process which is followed by contraction of the new formed scar tissue. Case 3 would seem to illustrate the congenital form, whilst Case 4 was probably acquired.

To Illustrate Dr. Blumer's Article, "Further Notes on Abnormalities of the
Urinary System."

Albany Medical Annals, January, 1901.



CASE 2.

Extreme Hydronephrosis, showing Constriction and Kink in the Ureter. About
three-fifths natural size.

Cases 5 and 6 are examples of complete duplication of the ureter on one side. They resemble each other so closely that a single discription would almost suffice for both. Both were accidental finds, one occurring in a man aged forty-five, the other in a child of three years.

In the first case (*Case 5*), which occurred on the right side, two ureters originated one above the other in two separate pelves. The pelvis emptying into the upper ureter drained the entire kidney with the exception of one pyramid; that springing from the lower part of the kidney drained a single pyramid. Both ureters were the same size, averaging three millimetres in diameter. They ran parallel their entire length and emptied into the bladder by two distinct orifices separated from one another by a very thin partition.

The second case (*Case 6*), also occurred on the right side and presented almost identically the same condition except that the organ was smaller. In this case also the two ureters originated from two separate pelves; an upper which drained the entire kidney except one pyramid, and the lower which drained the remaining pyramid. The two ureters opened by two separate openings, just as in the other case; in both cases the lower ureter opening slightly below and external to the upper one. There were no abnormalities of the bladder in either case and the kidneys themselves were normal. The foetal lobulations were much better marked in the kidney of the adult than in that of the child.

Complete duplication of the ureter is only relatively rare, though much rarer than those cases in which the ureter is double at its origin and fuses before entering the bladder. In some of these cases one of the ureters may empty into the urethra; in other cases there may be a hydro-ureter of one of the twin ureters, (Weigert; *Virchow's Archiv*, Vol. 70), or of both of them (Ramsay; *Johns Hopkins Hospital Bulletin*, Vol. 7.)

It is to be noted that in each of these cases the ureters opened into separate pelves, one of these in each instance corresponding to a single pyramid of the kidney, whilst the other corresponded to the remaining pyramids. This duplication of the pelvis generally accompanies the duplication of the ureter in the cases described in the literature, but it is not generally noted that the two pelves were unequal in size; in fact judging from many of the descriptions and drawings they are generally equal.

Case 7 is an example of hour glass bladder, an accidental find in a man of sixty, who died of carcinoma of the stomach. The description of the bladder is as follows:

The bladder is divided into two unequal cavities, both of which are roughly circular in shape. These cavities lie one above the other. The upper cavity, which is the smaller of the two, is five centimetres in diameter. The lower is nine centimetres in diameter. They are separated from one another by a circular orifice one and a-half centimetres in diameter. The outer surface of both cavities is much alike, being covered with normal looking peritoneum. Beneath the peritoneum of the upper cavity, however, there is more fat than is present beneath that of the lower one. Separating the two cavities on the outer surface there is a distinct groove averaging a centimetre in width and corresponding to the internal opening by means of which the two cavities communicate. There is absolutely no sign of any scar tissue in connection with this groove. The walls of the cavities vary in thickness. They are thickest at the line of junction of the upper and lower cavity where they form a regular muscular fold of a sphincter-like character. The walls of the upper cavity are very much thinner than those of the lower cavity, if the fatty portion of the wall is left out of consideration. The muscular portion of the wall of the upper cavity averages one millimetre in thickness, while that of the lower cavity averages three millimetres in thickness. The thickest portion of the wall, which lies immediately opposite the opening between the two cavities, is one centimetre in thickness. The mucous membrane of both cavities is normal looking. That of the lower cavity is somewhat more irregular than that of the upper, passing in one or two places into small diverticula. The openings of the ureters are present in their normal positions in the lower cavity. The prostate gland is not enlarged. There is absolutely no sign in connection with the upper cavity of any structure corresponding in position to the urachus.

Microscopic examination of the walls of the two cavities show that they have essentially the same structure, i. e., that of normal bladder. The only difference between the two is that the musculature of the upper cavity is much thinner than that of the lower cavity, whilst the wall of the upper cavity is considerably infiltrated with fat.

We have been unable to find any case exactly corresponding to this in the literature. Whilst division of the bladder into two literal halves is relatively common horizontal division seems very rare. Ahlfeld, in his *Missbildungen*, does not cite any cases. It seems probable, however, that the upper opening was part of the urachus. Wolff states that smooth muscle is found in the walls of urachus cysts, and this case in all probability represents the remains of a dilated urachus whose umbilical end has become completely obliterated. Finally, it must be noted that in none of these cases were there any signs of congenital abnormality in other portions of the urinary or genital systems.

To Illustrate Dr. Blumer's Article, "Further Notes on Abnormalities of the Urinary System."

Albany Medical Annals, January, 1901.



CASE 7.

Hour-Glass Bladder. Natural size, hardened specimen.

For the ANNALS

SURGICAL ANESTHESIA BY SPINAL SUBARACH- NOID COCAINIZATION—THE CORNING- BIER METHOD.*

By WILLIS G. MACDONALD, M. D.,
of Albany, New York.

That there is no uniformly satisfactory method of inducing surgical anesthesia is indisputable. The whole subject is being re-investigated at present by a considerable number of observers and several new or modified methods are being presented. The revival of spinal cocainization discovered by Corning and popularized by Bier and Tuffier has, at least, attracted much attention, although its general safety and utility are far from demonstrated. As a small contribution to this method of anesthesia I present in full the clinical notes of a case with the description of the technique employed:

The patient, a female, aged fifty-six years, was suffering from hemorrhoids, a rectal polypus, and fissure of the anus. Her disability was both painful and serious, through repeated hemorrhage; besides pronounced general circulatory disease was present with a deficient urinary secretion containing albumen and casts. For these reasons lumbar puncture was performed between the fourth and fifth lumbar vertebrae, and twenty minims of two per cent solution of cocaine hydrochlorate injected for surgical anesthesia. The injection was completed at 1:12 P. M., and the needle withdrawn two minutes later. Pulse 74; respirations 20. 1:16 P. M., slight diminution of painful sensation in legs. Pulse 1:20, respirations 26. 1:20 P. M., anesthesia of both legs and the region about anus. Tactile sensation normal. Pulse 120, respirations 30. Patient talkative. 1:22 P. M., operation begun without slightest discomfort to patient. Sphincters dilated, polypus and hemorrhoids removed by ligature, and fissure curetted thoroughly. During entire operation there was not a single evidence of pain, but tactile sensation was not disturbed. 1:30 P. M., operation and dressing completed. Patient nauseated, no vomiting, pulse small 116. 1:55 P. M., anesthesia persists and involves greater part of trunk and left arm, pulse 98. 2:30 P. M., slight tingling at point of opera-

tion which gradually increased until a hypodermic of morphia was required at 3:20 P. M. for the relief of pain. 6 P. M., anesthesia yet partially present in left hand and arm, patient restless but not in pain, pulse 84.

Second day. 11 A. M., patient complains of severe headache, no nausea, sensation normal in all parts of body. Pulse and temper normal. Convalescence followed without unusual symptoms.

This case presents the usual results attained when the very carefully defined technique of Tuffier is employed.

Earlier in the year—July 19, 1900—a modified method was employed in the case of a pronounced alcoholic with all but disastrous consequences. Very alarming symptoms immediately supervened after the injection, although the total quantity of cocain employed did not exceed one-sixth grain.

Again in other cases an effort has been made to reduce the quantity of solution employed to ten or fifteen minims of a two per cent solution. The results of our investigations in this direction would seem to indicate that fifteen minims of a two per cent solution is approximately the minimum dose to be employed and that we should not exceed twenty-five minims as a maximum dose in the adult under any circumstances. The procedure must be attended with absolute asepsis and the puncture never made higher than the interval between the third and fourth lumbar vertebrae, the next lower interval being the point of election. A special syringe or at least special needles or canulae attached to a suitable anti-toxin syringe should be employed. Fig. 1 illustrates a very excellent syringe with trocar and canula. The size of the needle or canula is important and it should not exceed one millimeter in diameter. A length of eight centimeters will be frequently required to reach the sub-arachnoid space. In order to avoid as far as possible wounding blood vessels the points of needles and trocars should have a very short bevel. Platinum alloyed with iridium or fourteen caret gold have been found the most satisfactory metals for the manufacture of these needles. A. B. Husted & Co., of Albany, (Fig. 1) had made for me platinum iridium canulae with gold plated steel trocars having very short bevels. This combination gives

a very stable instrument that does not bend during introduction, is easily sterilized, and keeps free from rust.

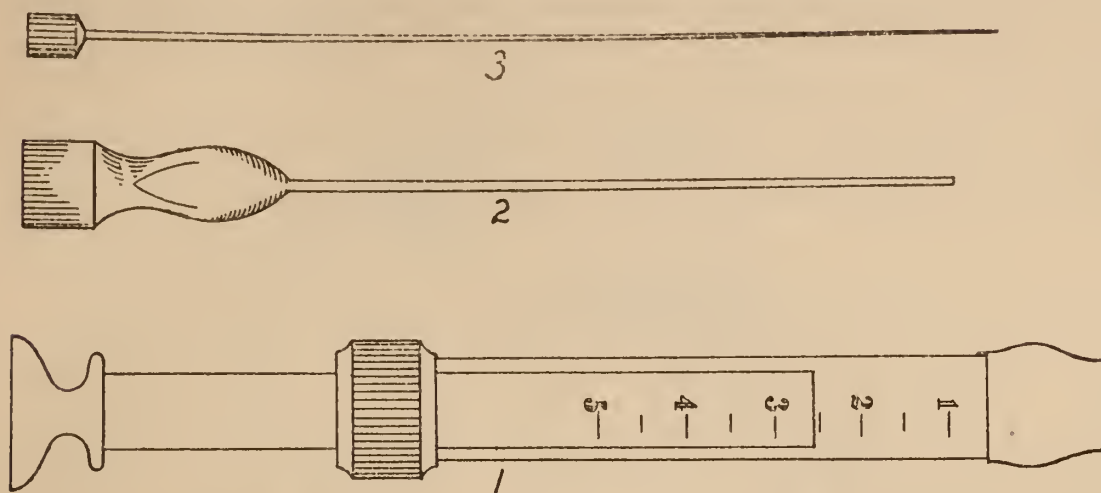


FIG. I.

Windler's Antitoxin Syringe. with Trocar and Canula for Spinal Subarachnoid Cocainization. Note short bevel on trocar.

It is not to be forgotten that sufficiently prolonged boiling of cocaine solutions for the purposes of sterilization destroys the anesthetic effect of the cocaine. Fractional sterilization at comparatively low temperatures may be regarded always with suspicion. In order to obviate these difficulties we have adopted the following method: A number of dram vials and corks are sterilized by boiling in one per cent carbonate of potash solution for twenty minutes, are rinsed in boiling sterilized water and allowed to drain in a sterilized towel. The cocaine is weighed from a specially broken package on sterilized scale pans using a sterile spatula to handle the drug. One grain of cocaine is placed in each sterilized vial and sealed. When required, fifty minims of sterile water is added and the solution is ready for use. Repeated cultures have been made from solutions made in this way with uniformly satisfactory results. Crystals of cocaine removed from unbroken packages are sterile.

The lumbar region must be prepared with the same care as the field of operation. When everything is in readiness the patient is allowed to sit erect on the side of the operating table with the feet dangling. The tops of crests of the ilium are fixed and connected with an imaginary line. In this way the spinous process of the fourth lumbar vertebra can be determined where the line crosses the spinal column (Fig. ii).

Having determined the spine of the fourth lumbar vertebra the patient is instructed to lean well forward in a scorching position and three to five minims of a two per cent cocaine

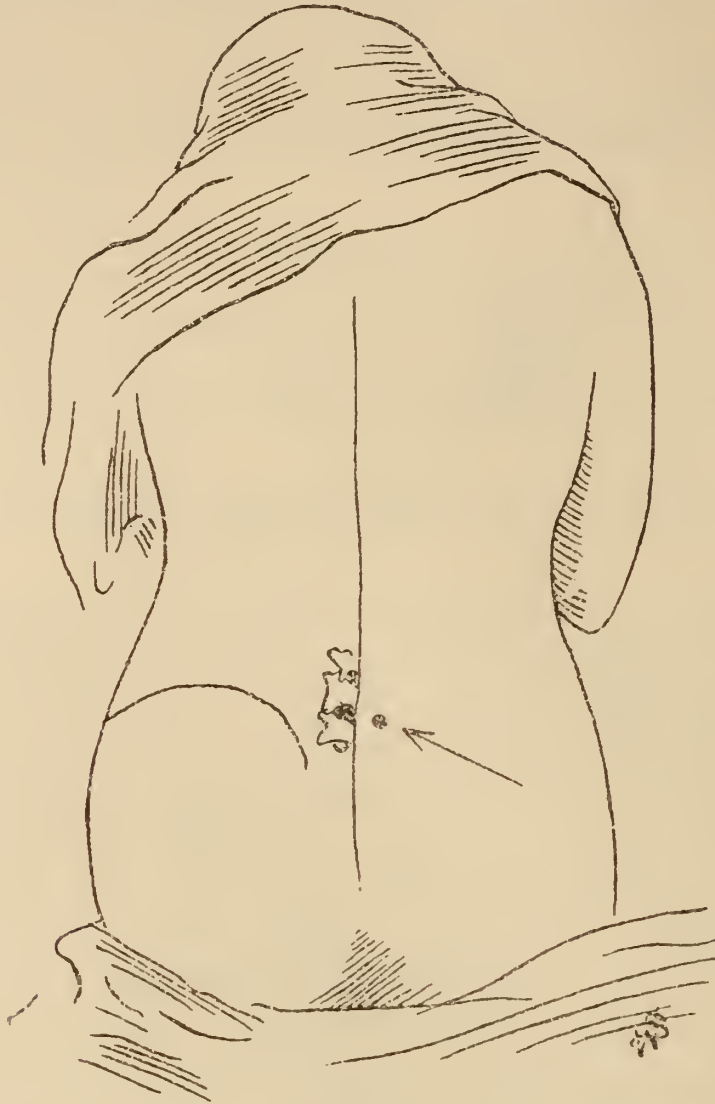


FIG. II.

Showing Point of Election for Lumbar Puncture in Subarachnoid Cocainization. The fourth-fifth intervertebral space on a level with upper border of the crests of the ilium.

solution is introduced one centimeter to the left or right of the spine and a little below the lower border of the process of the fourth lumbar vertebra. An ordinary hypodermic needle can be employed for the infiltration of the tract of puncture. The patient remaining in the already described position the tip of the left index finger fixes the spine of the fourth lumbar vertebra, the skin is punctured with a sharp scalpel, at the point of infiltration and the trocar introduced through this puncture is carried steadily forward, slightly

upward and inward until the tough intervertebral substance is perforated; the needle now glides easily forward a short distance giving the impression of having entered a cavity to the experienced touch. (Should the point of the instrument strike a bone it should be fully withdrawn at once and the direction changed to accommodate structures.) The trocar is now withdrawn and clear cerebro-spinal fluid flows in drops from the canula.

The flow of this fluid is essential to success and is the only evidence that the canal has been entered. No more cerebro-spinal fluid should be allowed to flow than is necessary to establish the fact of puncture. Carefully excluding air the syringe is attached and the determined amount of cocaine solution slowly introduced. The canula with syringe attached is allowed to remain two minutes in position then withdrawn and the puncture sealed with a collodion dressing.

Anesthesia will begin to appear in from six to twenty minutes—usually about ten—and continue from forty minutes to two hours or longer. The indications for the employment of this method would appear to be somewhat circumscribed but it undoubtedly has a field of great usefulness in a very considerable group of cases where the administration of the older anesthetics has been found unsatisfactory or dangerous.

AN EIGHTEENTH CENTURY CONSULTATION.

[The history of Dean Swift has a special value to physicians, not only because of the common interest in his writings, but also on account of the medical and psychological aspect of his life, which showed the influence upon his mind of persistently poor bodily health. To his debility may be attributed the satirical tone of his writings, which so often reached a degree of extreme bitterness. As a student he neglected his health, which was so impaired as to result in attacks of vertigo and prostration with forebodings of insanity, his melancholy disposition finding outward expression in his peculiar celebration of his birthday as a day of mourning. Scott records the fact that Swift was one day found "gazing in a solemn state of abstraction at the top of a lofty elm, whose head had been recently blasted by a hurricane, and he exclaimed: 'I shall be like that tree, I shall die at the top first,'" a prediction fulfilled in the ten years of insanity preceding his death. His anticipation of lunacy was so interwoven in his being that he bequeathed the larger part of his estate for the erection and support of St. Patrick's Hospital, for the care of idiots and

lunatics. By using the term hospital rather than asylum in connection with his projected institution, he appeared to recognize the claims of medicine, but it is not shown in his writings that he spared physicians more than others who were the victims of the barbed shafts of his satire. His account of a consultation shows such a keen appreciation of certain professional peculiarities that the ANNALS believes itself justified in reproducing the dialogue as given in Donaldson's edition of Swift's works, published in Edinburgh in 1768]:

A Consultation of four Physicians upon a LORD that was dying.

First Doctor. **I**S his honor sic? Præ lætus felis puls. It do es beat veris loto de.

Second Doctor. No notis as qui cassi e ver fel tu metri it. Inde edit as fastas an alarum, ora fire bellat nite.

Third Doctor. It is veri hi.

Fourth Doctor. Noto contra dictu in mi juge mentitis veri loto de. It is as orta maladi sum callet. Here e ver id octo reti resto a par lori na mel an coli post ure.

First Doctor. It is a megri mas I opi ne.

Second Doctor. No docto rite quit fora quin fi. Heris a plane fim tomo fit. Sorites Para celfus: præ re adit.

First Doctor. Nono doctor I never quo te aqua casu do.

Second Doctor. Sum arso: mi autoris no ne.

Third Doctor. No quare lingat præ senti des ire. His honor is sic offa colli casure as i fit here.

Fourth Doctor. It is æther an atro phi ora colli casu fed. Ire membri re ad it in doctor me ades esse, here itis.

Third Doctor. I ne ver read apage init, no re ver in tendit.

Second Doctor. Fer ne lis offa qui te deferent noti o nas i here.

First Doctor. Notis ab ludi fluxit is veri plene.

Second Doctor. I fitis a fluxit me re qui re ac lis ter.

Third Doctor. I a ver his cassis venere a lassu discover edit in as hanc cor; an da poli pus in his no fe. An di fit be as i cetis, ago no rea me en fue.

First Doctor. It is ad ange rus casas ani.

Fourth Doctor. I mus tellure alitis ago uti humor in his belli. Hi sto macto is empti.

First Doctor. It me bea pluri fi; avo metis veri proper fora manat his age.

Second Doctor. Ure par donat presenti des ire; his dis eas is a cataride clare it.

Third Doctor. Atlas tume findit as tone in his quid ni es.

Fourth Doctor. It is alea pro si fora uti se. Præ hos his a poti cari? cantu tellus. Ab lis ter me bene cessa rifum decens. It is as urem edi in manicas es.

Third Doctor. I findit isto late tot hinc offa remedi; fori here his honor is de ad.

Second Doctor. His time is cum.

First Doctor. Is it trudo ut hinc?

Fourth Doctor. It is veri certa in. His par is belli sto ringo ut foris de partu re.

Third Doctor. Næ, i sis ecce lens is de ad lætus en dum apri esto præ foris sole. His honor has bina cato liquor a de isti here.

First Doctor. Alor dis sum times as tingi as an ufu reris.

Second Doctor. A pi stolis aligo time a verbi mi at en dans fora forte nite.

Third Doctor. O mei ne vera tendo na nil ordinis sic nes ani more.

Fourth Doctor. Api stolis ne a quin in a nil ordo sis qua liti; sum pes fore times more. It istos mala fito a doctör o sis hic.

Second Doctor. Lætus paco fitis time.

First Doctor. Abigo ditis hi time inde editis forus alto fallas campe ringo fas fastas arato ut offa da iri; fori fera bea tinge veri minute; bimi solido. His lac quis, an das turdis auffi sto ut valet is readi forus.

Second Doctor. Ali feris ab aft in a do, fori here ano is at adis flans.

Clinical and Pathological Notes

A Case of Periostitis of the Seventh Rib Occurring During the Course of Typhoid Fever. From the Troy Hospital Service of DR. Z. ROSSEAU. Clinical Notes by WILLIAM KIRK, JR., M. D. Pathological Notes by GEORGE BLUMER, M. D.

Considering the fact that the majority of cases of typhoid periostitis occur from some months to years after the attack, it seems worth while to put the following case on record inasmuch as it occurred during the attack.

Clinical history. (Dr. WM. KIRK, Jr.)—Mrs. E. R., 39, married, U. S., housewife.

Family history.—A paternal aunt died of rheumatism; one brother died of Bright's disease with "leakage of the heart."

Personal history.—The patient had the usual diseases of childhood, and had an injury to right knee, inflicted by a fall

when six years of age. From this she made good recovery. Menstruation began at fifteen years of age; always regular. She married at eighteen and has had three children: first when she was twenty-four years of age; the second labor only was difficult. One child, nine years of age, had typhoid fever at same time with the father, but previous to the mother's attack. The patient last menstruated two weeks before entrance to the Hospital. Her habits are good. She does not drink alcoholic liquors; appetite is good; bowels are regular; there is no dysuria; she sleeps well.

Present trouble began with loss of strength and loss of appetite two weeks before entrance. The patient had continuously drunk city water. About one week before entrance the patient went to bed because of the severity of the symptoms. There had been no diarrhœa and there was no epistaxis. Constipation was noted.

September 27, 1900. On admission, the patient appeared as a woman of medium stature, poorly nourished, and somewhat anæmic in appearance. The temperature was 102°; pulse, 112; respirations, 36; eyes, latent strabismus; pupils react to light and accommodation; sclera pale in color; mucous membranes somewhat pale; no œdema; tongue heavily coated with brownish white fur; chest: depressions of supraclavicular and infraclavicular fossæ; expansion bilateral and equal; palpation and percussion negative, except for increased splenic dullness; auscultation negative; abdomen, scaphoid; pain upon pressure in region of umbilicus.

October 15, 1900.—Urine turbid, acid, specific gravity, 1.004, albumen present. Microscopic examination: occasional large hyaline cast, epithelial cells, amorphous urates. Patient is running a typical course of typhoid with moderate evening rise of temperature. No complications.

October 18, 1900. Patient has cough with expectoration of frothy mucus. Examination of sputum for tubercle bacilli negative.

October 21, 1900. Redness was noticed over an area at juncture of seventh rib and corresponding costal cartilage of the left side. There was tenderness upon pressure. The area was circumscribed, the size of a quarter of a dollar, soft

to the feel and fluctuating at the center. Presumably this is the fourth week.

October 22, 1900. The area above mentioned is slightly raised above the surface.

October 27, 1900. Pus aspirated from abscess over juncture of rib and costal cartilage. Evening rise of temperature has undergone a recrudescence.

October 30, 1900. Under ethyl chloride anæsthesia, free incision made into abscess and about a half ounce of thick, creamy pus, yellow in color, was removed. Smear from same examined but failed to find any organisms. Culture implanted on agar-agar.

November 7, 1900. Wound is closed.

November 14, 1900.—Widal reaction positive.

November 16, 1900.—Blood examination: reds, 2,714,000; whites, 8,000. Patient's temperature is normal in the morning but there is still an evening rise of two or three degrees. Examination of the seat of the periostitis shows a well marked scar on the left side over the juncture of the seventh rib and the costal cartilage. Healing is complete.

Bacteriological Report (Dr. BLUMER). The original culture was made from the pus on an agar tube. After forty-eight hours' incubation the surface of the agar was covered by numerous discrete pin-head sized, grayish-white, semi-translucent colonies. Cover slips from these colonies showed an organism which decolorized by Gram's method. With the ordinary methods of staining it showed some irregularities in staining, certain areas being more markedly stained than others. The organism was grown upon different media. It produced no liquefaction of gelatin, although there was a good growth along the stab. There was a very slight, shiny, varnish-like growth on potato. Glucose litmus agar showed an acidification but no gas formation, nor was any gas formation produced in one per cent. glucose bouillon in the fermentation tube. Litmus milk was acidified but not coagulated. Bouillon was evenly clouded. The organism from all these media showed morphology similar to that in the original culture. There was a tendency, on potato particularly, for the

organism to grow out in long threads. Examination of the hanging drop culture showed that the organism was actively motile. Widal tests were made with the organism, both from the blood of the patient and from blood from known cases of typhoid fever. In both instances with dilutions of one to twenty, there was a rapid typical clumping with loss of motility.

Bacteriological diagnosis: *Bacillus typhosus*.

A Record of Thirty-five Vaccinations of the Nurses in the Albany Hospital During the Year 1900. From the Albany Department of Health. By JOSEPH D. CRAIG, M. D.

The vaccinations were made with the greatest care and every detail was thoroughly looked after. In each case, the vaccinations were made on the left arm near the insertion of the deltoid muscle. The site of vaccination was thoroughly cleaned with distilled water and soap and afterwards wrapped in a bichloride pack for some time before the vaccination. The scarification was made with a sterilized needle and a fresh capillary tube was used in each case.

Primary vaccinations: total, 10; good vaccinations 10.

Days from vaccination to

Irritation: 4, 1, 6, 5, 3, 3, 3, 3, 3, 2.

Vesicle: 1, 2, 2, 1, 3, 1, 1, 1, 1, 1.

Pustule: 1, 2, 2, 0, 0, 2, 1, 1, 1, 1.

It will thus be seen that in half the cases first irritation appeared on the third day and the vesicle and pustule on the next day. In each case the reaction was rather severe, the average temperature being about 101° , accompanied with backache, nausea and aching limbs and several nurses were confined to bed for two or three days. In only one case was there a secondary infection with a large slough.

One previous vaccination: total, 20; good vaccinations, 15; no reaction, 5.

Of the fifteen cases which took, three were accompanied by severe reaction.

Days from vaccination to

Irritation: 3, 5, 2, 7, 0, 4, 3, 6, 2, 3, 1, 2, 3, 3, 3.

Vesicle: 0, 1, 1, 0, 2, 1, 0, 1, 2, 1, 1, 1, 1, 2, 0.

Pustule: 1, 0, 1, 1, 2, 1, 1, 1, 1, 2, 0, 1, 1, 1, 1.

Of the five vaccinations that did not take, one was revaccinated and without result. While the total number is rather small to make conclusive estimates, still, the proportion of seventy-five per cent. of good vaccinations and twenty-five per cent. negative results rather emphasizes the necessity of re-vaccinations after a period of years.

The reaction, being severe in only three cases, would lead one to suppose that had any of these nurses contracted small pox, in most of the cases the disease would have run a mild course.

Two previous vaccinations: total, 4; took well, 2; no reaction, 2.

Days of vaccination to

Irritation: 3, 4.

Vesicle: 4, 1.

Pustule: 1, 1.

There was one re-vaccination which did not take. In the two that did take, the reaction in neither case was severe.

Three previous vaccinations: total, 3; successful, 1; no reaction, 2.

There was one re-vaccination which did not take.

To sum up the total number of vaccinations: all the primary vaccinations took with severe reaction, and seventy-five per cent. of the second vaccinations took with severe reaction in three cases; of the third vaccinations fifty per cent. took with no severe reaction and of the fourth vaccinations thirty-three per cent. took with no severe reaction. None of the second vaccinations were successful.

The greater the number of re-vaccinations the less the reaction and the less proportional number of good vaccinations.

Correspondence

AN EXPLANATION.

95 LAKE AVENUE, ROCHESTER, N. Y.,

November 21, 1900.

TO THE EDITOR OF THE ALBANY MEDICAL ANNALS:

My Dear Sir—In my paper "Physical Exercises in the Treatment of Pulmonary Tuberculosis," published in your November issue, I quoted from a paper published by Dr. E. O. Otis in the

Boston Medical and Surgical Journal. Through inadvertence in making a type written copy the transcriber omitted to credit Dr. Otis. The quotation from Dr. Otis' paper is on page 629 commencing with the sentence "It must be borne in mind," etc. In justice to the doctor will you kindly allow this explanation to appear in your next issue.

Very truly yours,

PARKER MURPHY.

Editorial

The Parasitology of Parasites and the Prescience of our Predecessors Scarcely a month elapses nowadays without some parasitic disease of previously obscure origin taking its place in the ranks of those affections which are inoculated by means of an intermediate host. First we had the mosquito and filariasis, then followed the cattletick and Texas Fever, the tse-tse fly and certain South African diseases of cattle, the mosquito and malaria, and finally, according to Reed, Carroll, and Lazear, the mosquito and yellow fever. But the flea and the bed bug must not be forgotten. Several years ago Jonathan Hutchinson reported a primary sore on the leg as a result of a flea-bite, and an ingenious gentleman named Dewevre reports a case of tuberculosis which he considers due to the bites of infected bed bugs. Nuttall is to publish a book on the subject with a long-winded scientific title. Why not simplify it, and call it the Parasitology of Parasites?

We of the twentieth century are apt to plume ourselves on our strange discoveries, but it is doubtful if they were not perhaps suspected in this instance by our ancestors. In his account of the yellow fever of 1797, Benjamin Rush says "moschetoës were more numerous during the prevalence of the fever than in 1793. An unusual number of ants and cockroaches were also observed."

Even the laity may have seen the trend of future developments, "as through a glass, darkly," as the following lines from DeMorgan's Budget of Paradoxes suggest:

"Great fleas have little fleas upon their backs to bite 'em,
And little fleas have lesser fleas, and so *ad infinitum*."

Scientific Review

THE GERMAN ARMY MEDICAL CORPS

The wonderful modern progress of Germany is indissolubly associated intellectually with her giant-like strides in all forms of education—kindergarten, technical and university and politically with the magnificent development and the superb organization of her army.

This has not been the result of chance or a fortunate combination of circumstances but due to hard, thorough work guided by an intelligence which recognized that the true basis of any enduring advancement must be knowledge.

No department of the German government demonstrates this fact more clearly than does her army medical corps whose development and present status should teach a valuable lesson to our country now embarking upon a policy which demands the highest medical skill.

During the middle ages surgery in Europe was regarded as an ignoble calling because to work with the hands no matter how useful, honorable or ornamental might be the labor, was considered fit occupation for a serf alone. The church added its all-powerful influence to this conclusion when it taught *ecclesia abhorret a sanguine*—the church holds blood in abhorrence.

The inevitable result was that surgery was very generally given over to barbers, quacks and to public executioners who on account of their proficiency in breaking bones upon the rack were supposed to possess especial skill in the performance of even major operations. Paré by his successful operation upon Louis XIV, "le grand monarque," so elevated the position of surgery in France that in 1742 surgeons were declared to be a learned body and attached to the University of Paris.

Germany, like the rest of Europe, was far behind France in intellectual development and material progress and at this time although physicians were attached to the staff of the general and to each army corps, the surgery was done by barbers and their apprentices. Spurred on by the advances made in France and appalled by the unnecessary and frightful mortality and suffering among the wounded, Frederick William

sent two medical students and three surgeons to Paris for further study in surgery and in 1713 established in Berlin a school of anatomy for army surgeons. In 1726 he decreed that the hospital of Berlin, the Charité, should be placed at their disposal for clinical instruction. Frederick the Great, who did so much for the educational development and the military prowess of Prussia, further improved the character of their work by having frequent examinations held. He invited in 1744 twenty-four surgeons from Paris to give instruction to the surgeons in his army.

The fact remained however that these surgeons were nothing more than barbers and barber apprentices. This made necessary a still more radical change if better results were to be continuously secured. In 1795 the Emperor William established in Berlin at an annual expense of 6000 dollars an academy, which was called, after the founder, Kaiser Wilhelm Academy, for the instruction of these barber apprentices in surgery and Latin. Instruction was here given to the assistants needed for the army and further instruction to those who were already in the army. Older surgeons were appointed to instruct the younger and they themselves were given opportunity for more advanced self-instruction. These students entered at from seventeen to nineteen years of age and at first numbered eighty-one. They received instruction for four and a half years and then served in the army for at least eight years. Free lodging and six dollars monthly were allowed to each student and the cost of courses in anatomy, obstetrics and operative surgery was defrayed by the endowment. In order that these students should not waste time and money in riotous living, they were placed in groups under the jurisdiction of older surgeons who controlled their expenses and allowed them a small sum daily if their expense account showed that they had foolishly squandered their allowance. They arose at five o'clock in the summer, at six in the winter and retired at ten o'clock. On account of their youth they were not permitted to smoke.

In addition to the four years and a half theoretical instruction, they did practical work in the Charité for a half year and after 1804 for an entire year before their entrance into the army.

The establishment of the University of Berlin in 1809 and the inauguration of the State examinations in 1825 removed the differences in the training of the military surgeons and civil physicians. In 1829 the Charité was assigned to the University for clinical instruction but by decree of the ministry the students of the Kaiser Wilhelm Academie were still to receive their practical training for one year.

This academy at present has 207 students chosen after competitive examination, modified to some extent by family influence, from all parts of Germany, except Bavaria and Saxony, who still retain the control of the organization of their armies. They receive from the State free lodging and tuition and thirty marks monthly. For medical books, preparations and instruments the student pays one third and the State two thirds. After the regular medical course which is amplified by special instruction and quizzes by army surgeons, they have one year's service in the Charité rotating in the different services. They are then assigned to duty as assistant surgeons. After some years practical service in army hospitals, attached to regiments or in the colonies they are ordered back to Berlin for post-graduate study. If they show an especial aptitude for scientific research they may be appointed assistants to the different professors. They can then resign from the army and devote themselves exclusively to medical science. The result of this training is at once seen in the professional standing of the men who have been thus developed. The roster of graduates shows the names of v. Helmholtz, Virchow, v. Winckel, v. Leyden, Nothnagel, Gaffky, Loeffler, Hueppe, Renvers, Behring, Goldscheider, Widenmann, whose reputations are international, and of a host of others who are physicians of acknowledged high repute. In fact the army surgeon is very often the general consultant for the section where he is assigned. Germany believes that if the youth of her country must undergo enforced military service, and her geographical position makes this seem inevitable, then it is her duty from every standpoint to take the very best possible care of them. Her army surgeons should not only know as much as civil surgeons but a little more. War under the best possible conditions is hell but no nation is justified in this twentieth century

in demanding martyrdom in addition to patriotism and in adding unnecessary cruelty and suffering to the inevitable hardships and disease. The wisdom of this policy is at once apparent even in time of peace. Five per thousand French soldiers are sick annually with tuberculosis, four per thousand Russian, 3.4 per thousand Austrian and 2.3 per thousand German.

Its value in time of war is simply beyond estimate and it is bound to be oftentimes the deciding factor in victory or defeat.

The work of the army surgeon is not so much with the dressing of wounds and even with field surgery but with the care of the sick and especially with the prevention of that veritable scourge of armies, typhoid fever. Our own losses in the Spanish war were appalling and apparently most discreditable. 20,926 were sick with typhoid fever and 2,192 died, and of these eighty per cent were taken sick and died in the United States. The experience of Great Britain in the African war is equally disgraceful and is the subject of a parliamentary inquiry. There is said to have been up to August 20,000 of the British forces sick and more than half of these had typhoid fever, the treatment of which was primitive and almost barbaric and the mortality admitted to be 21 per cent. The British losses were 19 per thousand killed or died from wounds and 31.8 died from disease. In the Franco-German war 30.9 per thousand were killed or died from wounds and 14.2 died from disease. Although Germany had 50 per cent. more killed she had relatively less than half as many die from disease, a frightful discrepancy which even climatic differences do not explain. In the German military expedition to China the medical care of the troops has been made of the highest importance. Each officer received a pamphlet giving hygienic directions to be observed on ship-board and in the East. He is ordered to instruct his men in these subjects. Apparatus for the sterilization of drinking water are furnished and army medical officers especially proficient in bacteriology will accompany the expedition, not only to examine the water and food but also to investigate any suspicious causes of disease. The medical corps is large, one medical officer for 129 men. Supplies for

the erection of sufficient stationary and field hospitals have also been furnished. It will be an interesting and profitable study to compare the mortality from disease in the different European and American armies in China under practically similar conditions, but it needs no prophet to foresee the result.

ANDREW MACFARLANE.

State Medicine

THE DISPENSARIES AND THE NEW REGULATIONS.

The New York Legislature of 1899 enacted a measure known as the Dispensary Law, which went into effect October 1, 1899, and provides for the licensing and regulation of all the dispensaries in the State by the State Board of Charities. During the interim between the enactment of the law and the time when it went into effect, this Board appointed from its members a committee consisting of Dr. Stephen Smith, Dr. Enoch V. Stoddard and Simon W. Rosendale to formulate rules and regulations, following the letter of the law, to govern the work of all dispensaries in the State. There are numerous physicians, among whom not a few are attending at dispensaries who are not familiar with the law or the rules and who in fact have never seen either.

The rules and regulations recommended by this committee after extensive correspondence with the managers of the various dispensaries, were adopted October 11, 1899, and are as follows:

I.

Posting a Public Notice.

There shall be posted and permanently maintained in a conspicuous place in the reception room for applicants a notice substantially as follows:

This Dispensary has been licensed under the laws of the State of New York by the State Board of Charities to furnish medical or surgical relief, advice or treatment, medicine or apparatus to the sick poor who are unable to pay for the same. The law provides as follows:

(Section 25, Chapter 368, Laws of 1899.)

Any person who obtains medical or surgical treatment on false representations from any Dispensary licensed under the provisions of this act, shall be guilty of a misdemeanor, and on conviction thereof shall be pun-

ished by a fine of not less than ten dollars and not more than two hundred and fifty dollars.

(Imprisonment until fine be paid may be imposed. Code Crim. Pro., § 718.)

II.

The Registrar.

There shall be an officer to be known as "The Registrar," whose duty shall be to supervise the work of the Dispensary, make and preserve all records, receive all applicants, and see that all rules and regulations are enforced.

III.

The Admission of Applicants.

1. It shall be the duty of the Registrar to examine all applicants to determine the question of their admission, and the following rules shall guide his actions: (a.) All emergency cases shall be admitted and receive prompt treatment and care. (b.) Every applicant who is, in the opinion of the Registrar, after examination and personal inquiry, poor and needy, shall be admitted. (c.) Every applicant in regard to whose ability to pay for medical or surgical relief, advice or treatment, medicine or apparatus, or either in whole or in part the Registrar is in doubt, shall be admitted to a first treatment on signing the admission card, but the Registrar shall forthwith cause an investigation of his financial condition to be made; the results of such investigation shall be filed among the permanent records of the dispensary. (d.) Every applicant who declines to sign the required declaration shall be refused admission.

2. On the admission of an applicant to a Dispensary the Registrar shall file a card in the following form:

Name Date
 Dr No. in family
 Nationality Address
 Occupation. Man Woman
 Income Rent
 This is my application to this Dispensary in the year
 I have been an applicant to no other Dispensary in the year (or
 to the following Dispensaries:)
 Admitted Refused

The foregoing statement is in all respects true.

Signature of applicant

3. The Registrar shall issue to every applicant who signs an admission card, a pass card on one side of which shall be printed the usual information in regard to attendance upon the class to which he or she is assigned and on the other side of the card shall be the form following:

Penalty for False Representations.

Section 25, Chapter 368, Laws of 1899.

Any person who obtains medical or surgical treatment on false representations from any dispensary licensed under the provisions of this act,

shall be guilty of a misdemeanor, and on conviction thereof shall be punished by a fine of not less than ten dollars and not more than two hundred and fifty dollars.

(Imprisonment until fine be paid may be imposed. Code Crim. Pro., §718.)

IV.

The Matron.

There shall be a Matron whose duty it shall be, under the direction of the Registrar, to preserve cleanliness and good order in all parts of the Dispensary, and be present during gynæcological examinations and operations; no such examination shall be made of, or operation performed on, any female patient excepting in the presence of the Matron or of a woman detailed for such duty.

V.

Contagious Diseases Excluded.

The following contagious diseases shall not be treated in any Dispensary not devoted to the treatment of contagious diseases, viz.: small-pox, scarlet fever, measles, diphtheria. When a person suffering from any one of these diseases shall apply for treatment to any Dispensary, the Registrar shall take immediate measures to prevent the exposure of other persons in the Dispensary, and shall forthwith report the case to the proper health authority.

VI.

Instructions in Dispensaries.

Managers may make needful rules and regulations for clinical, secular and religious instruction in their respective Dispensaries, but in no instance shall any applicant be required to attend such instruction as a condition on which he or she can receive medical or surgical relief at the Dispensary. No applicant shall be required to submit to an examination, oral or physical, for other purposes than his or her proper medical or surgical treatment without his or her full and free consent; in the case of an infant, the consent of the father, mother or guardians, must be obtained for the purpose above mentioned.

VII.

The Apothecary.

The Apothecary must be licensed under the laws of this State or be a graduate of a regularly incorporated medical college. If employed in public service the Apothecary must be appointed under Civil Service rules.

VIII.

Sanitary Inspections.

The Managers shall make a written request, at least quarterly, to the local health board to have an official inspection of the entire premises of the Dispensary made, unless such inspection has been made during that period, and enter such request in its minutes and file a copy of the report of the health board in its office. All orders of the health board must be promptly complied with,

IX.

Arrangements and Equipment.

Each dispensary shall provide: 1. Seats for all applicants. 2. Arrangements for the separation of the sexes in both waiting and treatment rooms, except in cases of family groups and of infants. 3. Such equipment in the matter of rooms and supplies as will secure the best results of treatment.

In addition to these rules the committee submitted for record suggestions made by correspondence, some of which are preposterous and, if followed, the rules based upon them would tyrannize the physician, question his integrity and impeach his honor. Concerning these suggestions we cannot go into detail at the present time, but dispensary physicians generally feel that they have a safeguard in the wisdom of the State Board of Charities.

One suggestion, however, merits attention and discussion because of its manifest impracticability, viz.: "There should be two classes of physicians and surgeons: (a) visiting, and (b) assistants; the term of service should be limited, each class serving three years in the division to which he is appointed, making a full term of six years for one who has passed through both classes" Many dispensaries are run in connection with hospitals and colleges and in them the undergraduate and post-graduate students receive clinical instruction. They are in some instances supported by the efforts of the professors and instructors of a college and who act as visiting and assistant physicians to the dispensaries. It is to their interest to be faithful and painstaking in their work. What would be the result if this suggestion were made a rule? Every three years there would be a disruption and reorganization of the faculty of every important medical college in the State. The work of the dispensaries would be interrupted and periodically chaotic and the patients would feel the ill-effects of this constant changing quite as much as the hospitals and colleges. Such arbitrary restrictions as such a rule would impose upon the working of dispensary and college staffs would be detrimental to the welfare of the sick poor and to the interests of science.

In a circular issued October 10, 1900, by the State Board of Charities the rules above given were amended in some minor points but making no material changes.



HORACE TRACY HANKS, M. D., LL. D.

In Memoriam

HORACE TRACY HANKS, M. D., LL. D.

The subject of this sketch, whose death occurred on November 19, 1900, at his home in New York City, was born at Randolph, Vermont, June 27, 1837. He had been in poor health for several months as a result of the grippe, which was preceded by septicæmia a year or two before, contracted during a season of very hard work. He took two or three vacations, each time returning to his labors with his accustomed energy, but his constitution was so impaired that he was unable to resist an attack of acute Bright's disease, which terminated fatally in about three months after its early symptoms were noted.

Dr. Hanks received his early education at the Orange County, West Randolph, Vermont, and Royalston, Mass., academies. He was tutor in the latter institution. He taught in the East Randolph, Vermont, public schools for several winters. In 1859 he began the study of medicine under Professor Walter Carpenter of Burlington, Vermont. He attended courses of lectures at the University of Vermont, and took one course at the Albany Medical College, from which he received the degree of Doctor of Medicine in 1861. Soon after this he became House Surgeon at the Albany Hospital, where he remained until appointed Assistant Surgeon of the 30th New York Volunteers, in which capacity he served in the Armory Square Hospital at Washington, D. C. He was also engaged at the battles of Fredericksburg and Chancellorsville. After the mustering out of his regiment he returned to Royalston, Mass., where he remained until 1865, in which year he removed to New York. In 1872 he became connected with the Demilt Dispensary, where he remained for ten years. It was during this time that he developed his fondness and ability for gynæcological work, which was so earnest and thorough that when he resigned he was voted a letter of thanks by the officers of the institution, an honor unknown up to that time. In 1878 he gave a course of lectures on obstetrics at Dartmouth Medical College. In 1885 he was appointed Professor of Gynæcology at the New York Post-Graduate School and

Hospital, which position he held until his resignation a few years ago. He was appointed Surgeon to the Woman's Hospital in 1889, having been assistant surgeon a number of years before this time. He was also consulting gynæcologist to the North-Eastern Dispensary, Judson Dispensary, Tarrytown Hospital, Newark Hospital for Women, St. Joseph's Hospital in Yonkers, and Mt. Vernon Hospital.

Dr. Hanks devised several instruments, original and modified, some of them very useful and convenient, among them a table for the Trendelenberg position, needle-holder, dilator and needles for cervix operations, pessaries, etc. His contributions to medical literature were quite numerous, considering his active professional life. Some of his articles, if not original, were at least the first to attract attention in this country. One on "The Open Treatment of the Bowels after Restoring the *Sphincter Ani*," read before the Obstetrical Section of the Academy of Medicine, May 25, 1882, revolutionized the treatment of that condition. His article, "Counter-Drainage after Cœliotomy," from the *Post-Graduate*, 1893, caused the glass drainage tube to be generally abandoned. Among his other contributions are the following:

"A Plea for Primary Operation in Laceration of the Perinæum," *Post-Graduate*, 1888.

"Diagnosis of Intestinal Obstruction and Management of Intestines when Distended," *American Journal of Obstetrics*, Volume XXIV, 1891.

"Function of *Levator Ani*, in Treatment of Injuries of the Floor of the Vagina," *Transactions of the Medical Society of the State of New York*, 1891.

"To Prevent Mural Abscesses, Sinuses and Hernia after Laparotomy," *American Gynæcological Transactions*, 1891.

"To Prevent Secondary Hæmorrhage after Ovariectomy," *American Gynæcological Transactions*, 1892.

"Pelvic Inflammation in Puerperal Women," *American Medico-Surgical Bulletin*, May, 1893.

"Pregnancies Complicated by Uterine Tumors," *American Journal of Obstetrics*, March, 1888.

"Early Diagnosis of Ectopic Pregnancy and Best Method of Treatment," *American Gynæcological Transactions*, 1888.

"Remarks on Periuterine Cellulitis and Periuterine Peritonitis," *Albany Medical Annals*, 1885.

"President's Address before the Alumni of the Albany Medical College, March 4, 1885.

In 1898 the honorary degree of Doctor of Laws was conferred upon Dr. Hanks by Rochester University. He was an active member of the American Medical Association, hav-

ing been a delegate several times; of the Society of Medical Jurisprudence and State Medicine; Vice-President of the Academy of Medicine, three years; President of the New York County Medical Society, two years; member of the New York Obstetrical Society, Medical Society of the State of New York, the American Gynæcological and British Gynæcological societies; also a member of the Republican Club, Quill Club, Sons of the Revolution, LaFayette Post of the G. A. R., and the New England Society. He was a devout member of the Baptist church and at the time of his death President of the Baptist Social Union.

In 1895 the Albany Medical College Alumni Association of New York City was organized with a membership of about thirty-five, largely through his efforts. This membership has been increased to nearly one hundred active members and one hundred others in more or less close affiliation with it. In 1898 he was elected President.

Dr. Hanks married Martha L. Fisk in 1864. She died in 1868, leaving one daughter, who died in 1874. In 1872 he married Julia Dana Godfrey, of Keene, N. H. Their surviving children are Linda Tracy and Emily Grace Hanks.

Dr. Hanks was a man of rare personal magnetism, remarkably energetic and untiring in his pursuits. What his hand found to do was done with all his might. He was patient, conscientious and obliging to all with whom he came in contact. As an example of his wide-spread popularity and the high regard in which he was held, it is said his family received messages of sympathy from nearly every State and Territory in the Union. To the younger members of the profession he was most kind and helpful, full of humor and yet always the gentleman. He lived the true code of ethics, and, by his example, did much to raise it in esteem. By his devotion and earnestness to his profession and patients, by his love to his fellow men and his genial Christian life, he ever carried sunshine and gladness with him, and made the world brighter and better for his presence in it, so that, like the wish of the old Roman, it could have been truly said that,

“When life ends,
Occasion sighs and sorrows to my friends.”

WARREN C. SPALDING.

Medical News

Edited by H. Judson Lipes, M. D.

MEDICAL SOCIETY OF THE COUNTY OF ALBANY.—A regular meeting was held December 19th, 1900, in the Chemical Lecture Room of the Albany Medical College. The meeting was called to order at 9 p. m., the President, Dr. William Hailes, in the chair. The following members were present: Doctors Blair, Blumer, Carroll, Cook, Craig, Culver, Davis, Hailes, Happel, Hinman, Jenkins, Lanahan, LeBrun, Lomax, MacFarlane, Mereness, Moore, C. H., Morrow, Mosher, Neuman, Pearse, Sheldon, Skillicorn, Theisen, Thompson, Trego, VanderVeer, A., VanRensselaer, Washburne, Wiltse.

1. Reading of the minutes of the last meeting. Dr. MOSHER moved that as the minutes had been printed they should be accepted as printed. Seconded and carried.

There were no minutes of special meetings.

3. No new names were presented for membership.

4. No reports or resolutions were presented.

5. Under the head of special communications the Secretary read the following letter from Dr. Ramon Guit  ras:

THE THIRD PAN-AMERICAN MEDICAL CONGRESS,
INTERNATIONAL EXECUTIVE COMMISSION.

New York, November 20th, 1900.

George Blumer, M. D.,

247 State St., Albany, N. Y.

DEAR DOCTOR:—Will you kindly appoint delegates from your Society for the meeting of the Third Pan-American Medical Congress, which will take place in Havana, Cuba, February 4th to the 6th inclusive?

Very truly yours,

[Signed] RAMON GUIT  RAS.

Dr. MACFARLANE moved that the letter be received by the Society and that the President appoint as delegates any two members who were willing to go. The President remarked that he had understood that the accommodations in Havana for visitors were very meagre.

The Secretary then read the following letter from Mr. Geo. I. Bailey of the Bureau of Water:

CITY OF ALBANY,
DEPARTMENT OF PUBLIC WORKS,
BUREAU OF WATER.

Albany, N. Y., December 18, 1900.

Dr. William Hailes,

President Albany County Medical Society, Albany, N. Y.

MY DEAR DOCTOR:—As you know the City of Albany has established the largest sand filtering plant in the United States, and this plant has been in operation something over a year.

Since its installation and operation all city officers, and particularly those in the Bureau of Water, receive inquiries from physicians, sanitarians and

other people interested and located throughout the United States, asking what results the Filter Plant is giving, and particularly with reference to typhoid fever.

These requests for information demanded a courteous answer, and it became necessary for some one to undertake to furnish it, and while it was no one's special business, and rather a thankless task and additional work, I have undertaken to get the facts together.

A blank form asking certain questions in regard to the typhoid patients who are reported to the Board of Health was prepared, and at the end of each month one of these blank forms of inquiry is sent to each physician who has reported a typhoid case to the Board of Health. For the first few months this blank was something of a novelty, and there was no difficulty or trouble in having the questions answered and the blank returned to me for compilation. Since the novelty has worn off, there has been a delay in getting the answers, although there are only two physicians in the city who have absolutely refused to furnish any information.

This work that was undertaken simply as a matter of duty has developed into one of the best advertisements for this city that it has ever had. The information that is given out is eagerly sought, is published in technical journals and newspapers all over, and as a result of this publication our city is becoming widely known, and very much better known for its water supply than could be expected.

My purpose in writing you this is to ask if you will not kindly bring this matter to the notice of the members of your Society, and ask them if they will not take an active interest in the matter, at least to the extent of the few minutes that are necessary to fill out the blank sent to them. By so doing you will greatly oblige,

Yours truly,

[Signed] BUREAU OF WATER,

GEORGE I. BAILEY, *Superintendent*.

Dr. MACFARLANE proposed the following resolution:

Resolved: That the members of the Society be requested to fill out the blanks furnished by the Water Bureau, in order to make as complete as possible the typhoid statistics of this city.

The resolution was unanimously adopted by the Society.

Dr. NEUMAN stated his belief that many cases of typhoid were not reported, even from the hospitals. He thought the only statistics which were at all reliable were the mortality statistics

6. Reading of papers.

Dr. BLUMER read a paper on "The Bacteriology and Pathology of Influenza." The President suggested that as both papers were on similar subjects the discussion should be deferred until after the reading of Dr. Mosher's paper.

Dr. MOSHER then read a paper on "Influenza and the Nervous System." The President declared both papers open to discussion. He thought that the side of the practitioner, who meets cases daily, would be of value. He also suggested remarks on clinical observations and regarding treatment.

Dr. MACFARLANE stated that he was in Vienna at the time of Pfeiffer's discovery of the influenza bacillus, and that the discovery was received with a good deal of scepticism. The Viennese physicians had just been bitten by the Koch's tuberculin fiasco, and there was a good deal of scepticism regarding anything coming from Koch's laboratory. He also remembered the fight between Canon and Pfeiffer regarding the discovery of the bacillus. He thought that we had all been impressed with the effects of the influenza toxine in the body, not only the deleterious effects in general, but also as causing changes in other diseases, rendering them harder to discover. He mentioned the modification in the course of pneumonia as an example. Old physicians had stated to him that there was a remarkable difference between pneumonia, as it used to occur before the grippe epidemic, and since that time. He mentioned Sansom's article on the influence of the toxin on the heart, and the effects on the nervous system of that organ. Both bradycardia and tachycardia might occur. Sansom claimed that tachycardia gave a bad prognosis.

Dr. COOK stated that he had not been present at the beginning of Dr. Blumer's paper and asked regarding the transmission of the influenza bacillus.

Dr. BLUMER replied that it was transmittable by special contact, the actual method of transmission being inhalation of the moist particles of mucus detached by the active coughing.

Dr. HAPPEL related two cases which he had recently seen, the first a woman whom he had seen twelve days ago. She had pain in the head and eyeballs, myalgia, and a temperature of $103\frac{1}{2}$ degrees F. On the following day she had severe hemorrhage from the bowels, tympanites and a dicrotic pulse. The following day she had a typhoid tongue and was delirious. He was of the opinion at this time that she was suffering from typhoid fever, but, when after six or seven days, the temperature suddenly dropped he found that he had to revise his diagnosis. The Widal reaction was tried but it was negative. The second case illustrated the occurrence of bradycardia in grippe. The patient was in bed a week ago for three or four days and was quite ill. She had developed to-day disorders of vision and the pulse had fallen to fifty-six. He thought another point brought out by these papers was that we should never say to the patient that the case *only* grippe.

Dr. HAILES thought in the first case that the severe hemorrhage so early in the attack was against typhoid, as was also the rapid pulse.

Dr. HAPPEL replied that he thought the rapid pulse was due to the hemorrhage, and that the presence of other typhoid symptoms, such as a typhoid tongue, etc., was very deceiving.

Dr. COOK spoke of the treatment which he had used. He used salol and acetanilid in uncomplicated cases with good results. In complicated cases he used stimulants and other drugs as called for. He was convinced that grippe was a contagious rather than an infectious disease.

The PRESIDENT, in discussing Dr. Blumer's paper, asked regarding the advisability of quarantine. He also spoke of cases developing in the same house at long periods after the first case and asked for an explanation.

Dr. BLUMER suggested that quarantine would be a good proceeding, as the disease was contagious. He thought that the fact that the individual escaped the attack at first, and got it later, was generally due to their not being susceptible at first, while later they might have some local lesion of the air passages, such as a coryza, which rendered them susceptible.

A motion to adjourn was made, seconded and carried.

GEORGE BLUMER, *Secretary*.

WILLIAM HAILES, *President*.

MEDICAL SOCIETY OF THE STATE OF NEW YORK.—The ninety-fifth annual session will be held in Albany on January 29, 30 and 31, 1900, under the presidency of Dr. A. M. Phelps. An extended preliminary announcement has been made, showing a great abundance of papers. It has been necessary to divide the sessions of Tuesday afternoon and evening into medical and surgical sections in order to provide for the presentation of papers. The President's inaugural address will be delivered Tuesday morning, January 29, at nine o'clock, and the annual address on Wednesday at quarter after twelve o'clock. The Wednesday morning session will be taken up with a demonstration clinic at the new Albany Hospital, under the direction of Drs. Albert VanderVeer, Willis G. Macdonald and Samuel B. Ward, and with a discussion upon a paper to be presented by Dr. Charles A. L. Reed, of Cincinnati, President of the American Medical Association, upon Pelvic Infection in Women. On Wednesday afternoon, Dr. J. Collins Warren, of Boston, will lead a discussion upon the Surgery of the Spleen. On Wednesday evening a reception will be held from half after six to half after seven o'clock, to be followed by the annual dinner at eight o'clock. The Business Committee directs attention to the fact that executive business is limited as far as possible to the morning session of the first day of the meeting.

Suggestions as to changes in the preliminary program, or relating to the presentation of papers should be sent to the Business Committee, which consists of Drs. Frank VanFleet, Chairman, 63 East 79th Street, New York, J. B. Ransom, Danemora, and F. H. Parker, Auburn.

ALBANY MEDICAL COLLEGE ALUMNI ASSOCIATION OF THE CITY OF NEW YORK.—At the annual meeting held in December, the following named officers were elected for the ensuing year: President, Dr. Edwin Barnes ('65); vice-president, Dr. Allen Fitch ('79); secretary, Dr. Warren C. Spalding ('81); assistant secretary, Dr. Bernard Livingston ('99); treasurer, Dr. Edward F. Quinlan ('68); governors, Drs. S. E. Armstrong ('85), William F. Holcomb ('49), Thomas H. Willard ('87), Frederick Loughran ('90), Thomas D. Crothers ('65), *ex-officio*; committee of arrangements, Drs. R. F. Macfarlane ('88), chairman, Allen Fitch ('79), M. L. Rhein ('80), George Baker ('86), H. F. C. Müller ('87), Edward B. Coburn ('90), C. deW. VanDyck ('79), L. N. Lanehart ('83), John A. Cutter ('86), Charles Van Wert ('87), J. H. Cotter ('94), A. Parker Muir ('96).

The sixth annual banquet and reunion will be held at the Hotel Savoy, Friday evening, January 18, 1901, at seven o'clock.

ALBANY BOARD OF HEALTH, REPORT FOR NOVEMBER.—Health Officer Craig has made the following report for November: Number of births, 86; marriages, 42; deaths, 135 from the following causes: apoplexy, 11; cancer, 11; pneumonia, 12; Bright's disease, 11; old age, 7; accident and violence, 3; cholera infantum, 1; typhoid fever, 4; diphtheria, 4; consumption, 26. Of the total number 25 were 70 years of age or over and 25 under one year. During the month there were the following number of contagious diseases reported: typhoid, 25 cases (5 in hospitals); scarlet fever, 17; measles, 14; diphtheria, 46; chicken pox, 9; consumption, 3. The death rate for November was 15.90 and for October, 16.61. For the first ten months of 1900 the death rate was 171, while for the same period in 1899 it was 191.

Out of the total of 135 deaths, 22 occurred in the various hospitals, as follows: City Hospital, 10; Homeopathic, 4; Little Sisters of Poor, 2; Alms Houses, 3; St Peter's, 2; St. Margaret's, 1.

In addition to the tabulation it might be said in regard to the cases of typhoid fever that only two cases were reported to this department since November 14th, in other words, twenty-three of the twenty-five cases were reported during the first two weeks of November and there have only been two cases of typhoid reported in the first two weeks of December, which is a very satisfactory showing. In the case of diphtheria, it has been noticed that there has been a marked increase in the number all over the country, the number reported in Albany bearing a proportional relation to those reported in other places. It will also be noticed that there were twenty-six deaths from consumption and only three cases of the disease were reported. It is hoped that the confidence of the profession will be obtained to an end that a larger number of these cases may be on record in this office. It is the hope of the Health Officer to fumigate all rooms where persons have died from this disease, but at present the office force is not sufficiently large to do it. No more cases of smallpox have been reported.

THE ALBANY HOSPITAL.—The Board of Governors of the Albany Hospital will meet on the second Sunday afternoon of the month, hereafter, instead of the second Saturday, an amendment to that effect having been made to the by-laws at the meeting held in November at the office of Judge Learned. The Thanksgiving dinner of turkey was provided, in accordance with their annual custom, by Mr. James McCredie, president of the Board of Governors and Mr. John G. Myers.

An important meeting of the Board of Governors was held December 9th. The disposal of the old hospital building on Eagle and Howard streets was first brought up. The property was sold to Mr. John G. Myers some time ago for \$12,000, and he sold it for \$16,000 to the Mohawk and Hudson River Humane Society. This amount, with the exception of the taxes, he gave to the hospital. Messrs. Luther C. Warner, Patrick E. McCabe and the law firm of Rosendale & Hessberg were given a vote of thanks for their aid in disposing of the property.

Treasurer Charles R. Knowles reported that the expenditures for the beautifying of the grounds amounted to about \$13,000, which had been paid

by Mr. Dudley Olcott. The contract for a mangle for the laundry was awarded to the American Laundry Company of New York.

In the matter of the transfer of the title of the property on the corner of Howard and Eagle streets, formerly used by the Albany Hospital, the board of supervisors, on November 26th, went into committee of the whole and decided to report favorably upon it. When President Walker resumed the gavel, after the adjournment of the committee of the whole, the resolution transferring all title to the property to the Albany Hospital was, on motion of Supervisor Lindsay, passed.

THE ALBANY GUILD FOR THE CARE OF THE SICK POOR, STATISTICS FOR NOVEMBER, 1900.—Number of new cases 48; of these, 4 were dispensary cases receiving home care; 30 were district cases, and 14 were moderate income cases.

Classification of diseases: Medical 24 (5 contagious cases); surgical 16 (8 operations); obstetrical, 5 in the general work of the Guild, and 2 in special obstetrical department; eye and ear, 1; number of visits with nursing treatment, 539; for professional supervision of convalescents, 175; total number of visits for month, 714. Cases were reported to the Guild by the city physician, by four of the health physicians, and by twenty-one other physicians.

Special Obstetrical Department: The monthly reports of this department cover only completed cases, not including applicants who are under treatment during pregnancy. *Summary:* Number of patients in November, 2; one reported by Dr. Guyer, Health Physician, and one by Sister Julia of St. Peter's parish. Obstetrician, Dr. H. Judson Lipes. Number of calls, 15; students in attendance, 4; number of calls, 14; nurses in charge, 3; number of visits, 18.

HOSPITAL FOR INCURABLES.—It is announced that the Albany Hospital for Incurables is about to build a new hospital. The trustees of the institution held a meeting quite recently, but nothing definite was decided. There are a number of sites under consideration by the trustees, and the one selected will be taken on account of its healthful location. It is probable that the building will be erected on the outskirts of the city, some such location as that of the Albany Hospital will be secured. Among recent contributions to the building fund are: From Miss Jermain, \$500; Rev. Dr. Spensley, \$1,000; Benjamin W. Arnold, \$100; Dean Sage, \$100.

GLENS FALLS' NEW HOSPITAL.—Glens Falls has reason to be proud of its latest acquisition, the Parks hospital, which is now practically ready for the reception of patients. It has taken nearly a year to construct and furnish it, but it will be conceded that the result justifies the management in taking ample time. The building is a handsome three-story structure, with broad piazzas on three sides, with a new two-story addition in the rear.

THE ASSOCIATION OF GRADUATE NURSES OF NORTHERN NEW YORK.—“The Association of Graduate Nurses of Northern New York” was organized December 8th, at a meeting held at the residence of the nurses of the

Guild for the Care of the Sick Poor, Miss Florence E. Poole, presiding. A constitution and by-laws were adopted, and officers were elected for the ensuing year, as follows: President, Miss Poole, head nurse for the Guild for the Care of the Sick Poor; first vice-president, Miss Emily MacDonnell, superintendent of the Albany Hospital Training School for Nurses; second vice-president, Miss Calender, of the Albany hospital staff; recording secretary, Miss Woodworth, formerly of St. Luke hospital, Chicago, etc.; corresponding secretary, Miss Elizabeth Rupp, of the Guild for the Care of the Sick Poor; treasurer, Miss Smith, of the Albany hospital staff. The object of the association is the advancement of the profession of nursing and the development of loyal and sympathetic feeling among the nurses of Albany and its vicinity. The association, as its name implies, is planned to be sufficiently broad in scope to include the nursing profession of surrounding towns and villages. Any nurse who has had a general hospital training is eligible to membership, and it is hoped that the young association in time may become affiliated with the national organization of nurses which is doing much to dignify the standard of the profession and to promote the best interests of nurses along practical lines. Meetings will be held twice each month.

THE HUDSON RIVER HUMANE SOCIETY.—The Albany county members of the Humane society have acquired a right of title to the old city hospital property on Eagle street, corner of Howard, and propose to use this building as a house of detention for unfortunate and criminal children.

GOLDEN JUBILEE OF TROY HOSPITAL.—About two hundred representatives of the medical profession of Troy and vicinity assembled at the Troy club, Wednesday evening, November the 28th, to attend the celebration of the fiftieth anniversary of the Troy hospital. Besides the physicians there were present Rt. Rev. T. M. A. Burke, bishop of the Albany diocese; Very Rev. J. J. Swift, V. G.; Dr. William Osler, physician-in-chief of the medical staff at Johns Hopkins University at Baltimore, Md., and Dr. William P. Mason of the Rensselaer Polytechnic Institute.

At 8:30 o'clock Dr. Houston opened the exercises with a brief address of welcome, during which he said:

“To our guests assembled on this the fiftieth anniversary celebration of the Troy hospital, I, on behalf of the whole staff of the institution, extend a very cordial welcome. Events which occur so frequently as once in fifty years are not stale by custom, and it is gratifying to the entire staff that so many friends are present at these, our jubilee exercises. The president of the staff, who has labored for many years and efficiently to promote all the interests of the hospital, has been entrusted with the care of presenting a report of the institution. I therefore take great pleasure in presenting to you Dr. C. E. Nichols.”

After Dr. Nichols' address on “The Troy Hospital, 1850–1900,” Dr. Houston introduced Dr. Osler, of Baltimore, who spoke on “The Influence of a Hospital on the Medical Profession of a Community.” Professor William P. Mason, of the Rensselaer Polytechnic Institute, discussed “Some Medi-

terranean Water Supplies," and amply illustrated his subject by pictures and lantern slides. Bishop Burke was the last speaker; at the conclusion of his remarks, each member of the assemblage was presented to Dr. Osler and Dr. Mason, after which all passed into an adjoining room, and were served with a collation.

THE TYPHOID FEVER EPIDEMIC IN TROY.—Dr. C. E. Nichols, Health Officer of Troy, has submitted to Commissioner of Public Safety Coyle a report of the thorough investigation by the Department of Health into the cause of the recent epidemic of typhoid fever. The report includes also the results of an examination of the drinking waters used in this city, and the recommendations based thereupon. The report states: "It was evident that typhoid fever, which appeared in epidemic form late in August and reached alarming proportions in September, was due to some pollution of our water supply. In this instance no attention was given to the milk or food, as there was no suggestive evidence pointing to them, and sufficient evidence or proof was found in other directions. The evidence which pointed to the city water supply was so apparent that we felt secure in stating that the source of infection was from the lower service. In conjunction with the Commissioner of Public Works, through the press, the Health Officer advised the public to boil the water as the only practical means we have of rendering infected water safe for use. The pollution of the city water was a direct result of pumping water from the river below the state dam—at a point where much sewage mingled with the water—into the River Street main. Two million gallons were supplied daily between the 16th day of August and the 3d day of September, the total being 36,000,000 gallons. Prior to this contamination we had no more than the usual number of cases of typhoid fever in this city. In fact, the books of this department show that no death took place during July attributable to this disease. In about ten days after this water was distributed through the lower service we began to receive reports of cases of typhoid fever, and at the end of the month we had a record of seven deaths and fifteen cases. In September there were eighteen deaths and 210 cases, and in October ten deaths with sixty cases, bringing the total number of cases between the 16th day of August and the 1st day of the present month up to 285, with the total deaths for the same period thirty-five. The disease is now decreasing very rapidly, a result we could reasonably expect, two months having elapsed since the discontinuance of the pumping of water from the locality stated into the mains, and we are confident that the epidemic is practically past. Had the community observed the warning, "Boil the city water before using," this epidemic would have been avoided. I am told that this method of supplying the city was unavoidable; that we must have water for the suppression of fire, for the prosecution of industries and for domestic use, and that drouth and breakage of the pumping machinery had depleted the supply to an inadequate quantity. For the information of this department I have secured, through the kindness of the attending physicians, the names, residences and the kind of waters used for drinking purposes in each case of the disease. The data enable me to make the fol-

lowing statements: of the whole number suffering from this disease, twenty-one resided on or east of Eighth Street, in the locality supplied by the upper service; two hundred and sixty-four lived west of Eighth Street, in the locality supplied by the lower service. The total number of patients using city water from the upper and lower services was 247. The number using lower service water only was 228, and the number using the upper service only five. The number using the city and city well water was nine, the number using city and spring water ten, the number using city well water only nine, the number using spring water (purchased) only five, the number using no water one, and not stated eighteen."

TYPHOID FEVER EPIDEMIC IN SING SING PRISON.—Since December 3d, twenty-seven cases of typhoid fever have occurred at Sing Sing prison and are now confined in the prison hospital. Several cases have been complicated with pneumonia and up to December 16th, there had been one death. The authorities are confident that the outbreak comes from the water served in the prison. The institution is connected with the Croton aqueduct, and no other possible source of the disease can be found.

ANOTHER CASE OF SMALL-POX IN ALBANY.—A case of small-pox was discovered at No. 53 Spencer street by Dr. G. H. Houghton, November 25th. Dr. Curtis was called in consultation. The patient, Milton G. Holdrige, his wife and mother, were removed to the pest house, another victim of the Williams and Walker performance at a local theatre recently. At Syracuse one of the members of the company was taken ill with this disease and at Pittsburgh, Pa., two more were stricken down. The company was there broken up and placed under quarantine. As soon as the case was reported the residence of Mr. Holdrige was quarantined and several of the health physicians began vaccinating everyone living in the surrounding neighborhood. No further cases were reported and Mr. Holdrige is doing well.

SMALL-POX IN SCHENECTADY.—A case of small-pox was reported to the local health board December 1st, the victim was Harry Teller, an employe of the opera house, and without doubt he contracted the disease from members of the Williams & Walker Company, which recently gave a performance in Schenectady. This is the company that was compelled to break up in Pittsburg because of the disease, and which also caused the cases in New York, Albany, Troy and Syracuse. Dr. Clute, the health officer of Schenectady, fearing an epidemic of small-pox, recommended the vaccination of all school children at a special meeting of the board of health. There is every prospect of a fight on the part of the citizens, should the board decide to order wholesale vaccination.

STATE TUBERCULOSIS HOSPITAL.—At a joint meeting of the State Forestry Board, the State Board of Health, and the trustees of the proposed tuberculosis hospital, held December 7th, a resolution was adopted instructing the trustees of the proposed hospital, a majority of whom had favored Big Clear Lake for a site, to report on alternative sites, with options and

prices for the land, and to give other details with reference to the advantages of sites other than that at or near Big Clear Lake. The respective advantages of the two sites were discussed, and stress was laid by the friends of the Dannemora site on its comparative inexpensiveness.

THE NEW YORK STATE HOSPITAL FOR THE CARE OF CRIPPLED AND DEFORMED CHILDREN.—The New York State Hospital for the Care of Crippled and Deformed Children, established by Chapter 369 of the Laws of 1900, is now open for the reception and treatment of patients. The hospital is located in Tarrytown, New York, at Paulding avenue and the Hudson river, about one mile below the railroad station. It has accommodation for about twenty-five patients. Its board of managers, appointed by the Governor, are the Rt. Rev. Henry C. Potter, bishop of New York, president; George Blagden, Jr., treasurer and secretary; J. Hampden Robb, J. Adriance Bush, and Newton M. Shaffer, M. D. The hospital was established "for the care and treatment of any indigent children who may have resided in the State of New York for a period of not less than one year, who are crippled or deformed, or are suffering from a disease from which they are likely to become crippled or deformed." The following conditions are imposed upon all applicants: "No patient shall be received except upon satisfactory proof made to the surgeon-in-chief, by the next of kin, guardian, or a State, town or county officer, under the rules to be established by the board of managers. Such proof shall be by affidavit. If there was an attending physician before the patient entered the hospital it shall be accompanied by the certificate of such physician, giving the previous history and condition of the patient." Under the extract from the act of incorporation, children afflicted with hip disease (hunchback), club-foot, knock-knee, bowlegs, the deformities following infantile paralysis, lateral curvature of the spine, the deformities of rickets, and the various disabling and deforming diseases of childhood, will be received and treated. Patients from four to fifteen years will be received, and all applications will be acted upon in the order of their reception. No patient will be admitted without an examination by, and a certificate from, the surgeon-in-chief, or his assistant. No patient whose condition is such that death is likely to occur in the immediate future, or whose condition precludes a reasonable amount of relief, as the result of treatment, shall be admitted.

THE NEW ASYLUM FOR INSANE CRIMINALS AT DANNEMORA.—There are now about one hundred inmates in the new Dannemora State Prison for insane criminals. The last draft of forty from the Matteawan asylum arrived recently in charge of fourteen attendants and accompanied by Dr. J. M. W. Scott, (A. M. C. '96). The trip from Matteawan was without incident of any kind, the men acting very quietly. Dr. R. B. Lamb, the superintendent, is an indefatigable worker and has done wonders in the way of arranging and settling the asylum, and everything about the institution is now in perfect working order.

THE SAMUEL D. GROSS, PRIZE ONE THOUSAND DOLLARS.—The conditions annexed by the testator are that the prize "Shall be awarded every five years to the writer of the best original essay, not exceeding one hundred and fifty printed pages, octavo, in length, illustrative of some subject in Surgical Pathology or Surgical Practice, founded upon original investigations, the candidates for the prize to be American citizens." It is expressly stipulated that the competitor who receives the prize, shall publish his essay in book form, and that he shall deposit one copy of the work in the Samuel D. Gross Library of the Philadelphia Academy of Surgery, and that on the title page, it shall be stated that to the essay was awarded the Samuel D. Gross Prize of the Philadelphia Academy of Surgery. The essays, which must be written by a single author in the English language, should be sent to the "Trustees of the Samuel D. Gross Prize of the Philadelphia Academy of Surgery, care of the College of Physicians, 219 S. 13th street, Philadelphia," on or before October 1, 1901. Each essay must be distinguished by a motto, and accompanied by a sealed envelope bearing the same motto, and containing the name and address of the writer. No envelope will be opened except that which accompanies the successful essay. The committee will return the unsuccessful essays if reclaimed by their respective writers, or their agents, within one year. The committee reserves the right to make no award if the essays submitted are not considered worthy of the prize.

W. W. KEEN, M. D.,

J. EWING MEARS, M. D.,

J. CHALMERS DA COSTA, M. D.

Trustees.

THE TUBERCLE.—The ANNALS has recently received Number 1 of Volume V of the *Tubercle*, a monthly journal and review of tuberculosis, edited by Thos. Bassett Keyes, M. D. (A. M. C. '95), and published at 92 State Street, Chicago. In this number Dr. Keyes has an original article on "The Treatment of Chronic Catarrh." An important paper on "The Progress in State Control of Tuberculosis in Canada" appears from the pen of Dr. P. H. Bryce of Ontario.

PERSONAL.—Dr. George P. Coopernail, of Upper Red Hook, has recently been appointed house physician of the Albany Hospital to fill the vacancy caused by the resignation of Dr. E. P. Sweet of Great Barrington, Mass., who has been appointed medical interne in the Hudson River State Hospital at Poughkeepsie.

MARRIED: IRISH-SNAPE.—At Westport, N. Y., on Wednesday, December 5, by Rev. J. C. Booth, Dr. Reuben Hayes Irish (A. M. C., '97) of Lansingburg, N. Y., and Margaret Irving, daughter of Mrs. William Snape, of Wrexham, North Wales.

CHANGE OF RESIDENCE.—Dr. J. Warwick announces the change of his residence from Worcester to 287 High St., Clinton, Mass.

Book Reviews

Manuel Complet de Gynécologie Médicale et Chirurgicale. Par A. LUTAUD, Professeur libre de Gynécologie, Medecin adjoint de Saint-Lazare, Membre fondateur de la Société Obstétricale et Gynécologique de Paris; Membre de la Société Gynécologique de Londres; de la Société de Médecine légale de France, etc. A. Maloine. Paris, 1900.

When the first edition of this book appeared in 1883 it was scarcely more than a compendium of what was then an almost barren field of medicine; now it reaches us in the full maturity of a fourth edition of something over 700 pages. Dating his earliest experiences to the time when the Gynecology of Nonat, Courty and Churchill was the formula of the day, Dr. Lutaud has since been a living witness of that wonderful transition phase when Marion Sims and Spencer Wells were the moving spirits of what to-day constitutes some of the most brilliant sides of operative surgery. Side by side with the advances made by such men as Martin, Schroeder, and Hofmeister in Germany, Péan, Pozzi, and Ségond in France, the author has not failed to adequately estimate the important steps made in our own country by Thomas, Emmet, Polk and Kelly.

Beginning in the traditional way with sections on the anatomical and physiological sides the author passes to a consideration of the technical features of diagnostic and operative gynecology. The part relating to operative technique, especially that embracing sterilization, is wholly inadequate for a book primarily intended for the general practitioner; specialists will scarcely find anything which would appeal to them. Sterilization and asepsis, which measure almost every operative result, should receive fuller treatment in works of the kind. Instead of a few vague generalizations such writers would contribute much more help with detailed descriptions of the essential steps of this department of technique. Moreover we regret to find too much mention of antiseptics and hardly a word of heat as a factor in aseptic surgery.

Following the preceding, special sections are devoted to the various diseases in the order of their anatomical distribution: external genitalia, urethra and bladder, vagina, uterus and finally uterine appendages. The view-point is almost wholly from that of the clinician whose experience has been wide enough; frequently, however, one identifies the shattered heritage of a former medical generation.

Measured by the standards of newer pathology and bacteriology this book will be found wanting; on the other hand gauged in the light of the general practitioner there will be revealed a wide clinical experience which will certainly prove helpful and suggestive to a class of physicians who treat affections of the female uro-genital organs not as specialists but as general medicine.

AUGUST JEROME LARTIGAU.

A Treatise on Mental Diseases. Based upon the Lecture Course at the Johns Hopkins University, 1899, and Designed for the Use of Practitioners and Students of Medicine. By HENRY J. BERKLEY, M. D., Clinical Professor of Psychiatry, The Johns Hopkins University,

Chief Visiting Physician to the City Insane Asylum, Baltimore.
With Frontispiece, Lithographic Plates, and Illustrations in the
Text. New York: D. Appleton & Company, 1900.

This book is divided into three parts, the first upon the Anatomy and Histology of the Central Nervous System, the second upon General Pathology, and the third upon the Clinical Forms of Mental Diseases. In six sections, Part I treats of the gross anatomy of the brain, and the histology of the cortex, giving special attention to the relation of the cortical elements to one another and the finer structure of the nerve cells. In Part II, a chapter is given to the Boundary Lines between Degenerative and Non-Degenerative Types of Insanity, in which problems of heredity and degeneracy are speculated upon, and the influence of infections and auto-intoxications in the production of insanity. In the succeeding sections of this Part are discussed, consecutively, the gross pathology of the brain in insanity, the special pathology of the neurones, the pathology of the cerebral vessels, with addenda upon syphilitic vascular lesions and arterial anomalies.

In this arrangement of the pathological substratum of his study the author indicates the plan of classification of mental diseases, in which the prominent feature is the distinction between functional mental disorders and insanities of the organic-degenerative forms. One of the best known groupings in which this distinction is emphasized is that proposed by Krafft-Ebing, which is now re-enforced by the pathological basis upon which Berkley seeks to establish it. This idea, which may be designated as the theme of the present book, is epitomized in the statement on page eight: "The vascular structures are of an importance hardly secondary to that of the nerve elements themselves. Indeed, *a priori*, it may be assumed that a badly organized or damaged nerve cell might function better than a well developed cell with an inferior supply of nourishment." The changes in the blood vessels and particularly arterio-sclerosis, have consequently received lengthy consideration, and in this direction the author has brought into prominence a series of facts which have been most singularly overlooked until the last decade.

The chapters on the structure of the cerebral neurone, its physiology and pathology, represent the most recent hypotheses, and may be said to be a complete discussion of this complicated subject, even to the inclusion of the "psychical neurone." The text here is elaborately illustrated by photographic reproductions, line-drawings and chromo-lithographs. In the author's strength, however, lies a source of weakness. In the face of rapidly changing theories, not only as to function, but even as to the structure of the finer nervous elements, the association of symptoms with pathological changes can only be theoretical, and tends to disregard of the time honored deductive methods of psychology. No mention is made of the tripartite subdivision of the human mind, and the mental faculties are considered in only a most cursory and sketchy way in two pages. As an example, the *faculty of attention* is said to be defective only in organic dementia. The author does not define *attention*, but in its usual acceptance, this faculty must be regarded as the first to yield, not only in all

forms of incipient insanity, but invariably, as the initial sign of mental fatigue. The other psychological elements discussed by the author are "purposeful will power," "sexual desire," "æsthetic and religious elements," "unwarranted fear," and "serial thought." It would seem that the consecutive steps in the mental reductions which constitute the evolution of insanity from health might have been given more consideration, not only as an interesting scientific study, but because, in the genesis of insanity, they become of the greatest importance to the physician, who most needs to know their seriousness.

The clinical portion of the book, under Part III, includes chapters on Idiopathic Insanities (without ascertainable alterations in the brain substance); Insanities Consecutive to Organic Lesions; Intoxication Insanities (following bacterial and toxalbumic poisons, and following autogenic poisons); Insanities of the Physical Degenerate; Insanities Following or Accompanying Constitutional Neuroses; States of Arrested Psychical Development, and the Psychoses of Childhood. This clinical section, which covers nearly five hundred pages, is a most valuable contribution to the literature of insanity. The descriptions of cases and the analysis of symptoms, the careful investigations of the excretions and secretions and the blood, are clear and exhaustive.

An especially interesting chapter is that on Febrile Deliria and Psychoses, a field which has been little worked, and of which no accurate synopsis of the conditions has yet been brought together in English. The differentiations between idiocy, imbecility and criminality are also very clearly made, the author going further than the mere statement that imbecility is a minor degree of idiocy, and giving a clear exposition of the symptoms upon which this distinction may be made. The addenda upon Cranial Measurements, the Stigmata of Degeneration, the Psychoses of Children and the Psychoses Peculiar to Tropical Regions, finish a very complete and exhaustive treatise, in every page of which is manifest the painstaking work of the author.

The American Illustrated Medical Dictionary. By W. A. NEWMAN DORLAND, A.M., M.D., Assistant Obstetrician to the University of Pennsylvania Hospital; Editor of the "American Pocket Medical Dictionary"; Fellow of American Academy of Medicine. Together with New and Elaborate Tables of Arteries, Muscles, Nerves, Veins, etc.; of Bacilli, Bacteria, Diplococci, Micrococci, Streptococci, Ptomaines and Leukomains, Weights and Measures; Eponymic Tables of Diseases, Operations, Signs and Symptoms, Stains, Tests, Methods of Treatment, etc., with Numerous Illustrations and 24 Colored Plates. Philadelphia and London: W. B. Saunders & Co., 1900.

At the present date, when time is everything to a busy practitioner, it is refreshing to pick up a dictionary which combines nearly all the information of an encyclopædia, but which is essentially a dictionary, and not a ponderous one at that. As the author states in his preface, he has endeavored to steer a middle course between the large unwieldy lexicon and the abridged student's dictionary, avoiding the disadvantages of each. He has succeeded admirably, and is to be commended for it. An interesting

feature of the work is the numerous tables of tests, stains, and staining methods, methods of treatment, etc., which it contains. This is a new departure, and one which will be appreciated by the student. It is an entirely new work, gotten up along new lines, and not a rehash of anything that has gone before. While it is not primarily a student's dictionary, still it can be used to a very great advantage by them, as it contains a mass of information outside of the mere definition of medical terms and their meaning. The paper, print and style of binding reflects credit upon the house that publishes it.

A. V.

The Physician's Visiting List for 1901. P. Blakiston's Sons & Co., Philadelphia.

The present edition marks the fiftieth year of the publication of the "Physician's Visiting List." That it has filled and is still filling a decided need is evidenced by its long life and popularity. Each year an attempt has been made to make the volume more complete and the present edition is unquestionably the most satisfactory that has yet appeared. The book is so arranged as to enable the physician to keep a brief record of his professional engagements, his accounts, and the addresses of patients and nurses. That it will recommend itself, as a handy pocketbook, to the busy practitioner goes without saying.

A. W. E.

Laboratory Directions for Beginners in Bacteriology. An Introduction to Practical Bacteriology for Students and Practitioners of Comparative and of Human Medicine. By VERANUS A. MOORE, B. S., M. D., Professor of Comparative Pathology and Bacteriology, New York State Veterinary College, and of Bacteriology, Cornell University Medical College, Ithaca, N. Y. Second edition, enlarged and revised. Boston, U. S. A.: Ginn & Company, Publishers, 1900.

This little book, designed as a guide through the laboratory course, introductory to independent work or to the practical application of bacteriology in medicine, appears to fulfil its purpose admirably. The undergraduate student will find concise directions for the preparation of media and staining solutions, and will certainly acquire the habit of careful observation in the examination of cultures. Not only is he led to note the more obvious characteristics of the growth and microscopic appearances of the organism, but he is given a systematic and definite outline of all the essential points to be noted. An especially valuable feature for the student is the page of laboratory maxims. The busy practicing physician will value the book for the convenient methods it will give him for making bacteriological examinations of pus and exudates, for examining diphtheria cultures, staining for tubercle bacilli and making the Widal test in typhoid fever.

The author does not give complete descriptions of the various organisms studied, as the book is intended to lead the student to fix in mind their characteristics by studying them himself. There is a very complete system of references to current literature and text books on each of the subjects which are studied. That the book is popular is shown by the fact that the second edition has been so soon called for.

A. T. L.

Current Medical Literature

SURGERY

Edited by A. Vander Veer, M. D.

Resection of the Cervical Sympathetic. (La resection du sympathique cervical.)

TH. JONNESCO. *La presse medical Belge*, No. 36. 9 September, 1900.

Since 1896, the author has performed one hundred and twenty-six bilateral, cervical sympathectomies; some of them total, comprising all three ganglions, sub-total (superior and median ganglia) or partial, removing only the superior ganglion. In two cases even the first thoracic ganglion was removed. The operations were on ninety-seven epileptics, fifteen cases of exophthalmic goitre, twelve glaucoma and two of essential migrain.

He says he has considerably modified the technique and avoids section of the superficial cervical plexus and the spinal nerve. He performs bilateral resection at the same time. The benignity of the operation is absolute. There are no bothersome after-effects. Trophic troubles are not to be feared. Therapeutic effects have been excellent. Of the thirteen epileptics, operated in 1896, three were finally, definitely cured, one was helped, four operations were unsuccessful and in five cases the patients succumbed afterward (but this does not seem, from the article, to have been from the operation). Of the seventeen, operated in 1897, six were cured, two helped, five operations failed and four results are unknown. Of the nineteen, operated in 1898, three were cured, one helped, five operations failed and ten results are unknown. Of the twenty-seven operated in 1899, two were helped, one operation failed and twenty-four results are unknown. Of the twenty-one, operated in 1900, one was cured, two helped, one operation failed and seventeen results are unknown. In these statistics the results are not considered final, except as they have lasted at least two years. Thus, of the forty-nine cases, operated in 1896-98 inclusive, twelve cures and four ameliorations constitute an excellent general result. It is not proper to judge of failure or success soon after an operation, for the result may be totally changed in time, immediate success becoming a failure and *vice versa*. Of the fifteen cases of exophthalmic goitre, two were operated in '93, three in '97, five in '98, two in '99 and three in 1900. All of them have either been cured or remarkably helped. A cure consists in a modification of the general and nervous state, disappearance of the exophthalmia, the goitre and the heart symptoms. A final cure of six such cases was brought about in '96, '97 and '98. The other four cases of this series presented secondary Basedow's disease of marked form; they were much helped but not cured. It is not possible to judge of those operated in 1899 and 1900, since the results cannot be judged finally until at least two years have elapsed after the operation. The results obtained in the twelve cases of glaucoma have been communicated to the ophthalmic section of the Paris Congress, for this operation has been largely adopted by ophthalmologists and the results of it are most encouraging in cases of glaucoma. In

the two cases of migrain, the immediate results were excellent, but they are too recent to make it proper to speak of what are to be the final results.

Treatment of Facial Neuralgia by Resection of the Superior Cervical Ganglion of the Sympathetic. (Traitement de la neuralgie faciale par la resection du ganglion cervical superieur du sympathique.)

A. CHIPAULT. *Le progres medical*, No. 20, 3rd series, 1900.

When medical treatment fails, as too often happens, the patient whose trouble is facial neuralgia is confronted by surgical intervention which offers but little encouragement. Peripheral resections of the trigeminus, which are not dangerous but which afford only a few months of relief, and resections of Gasser's ganglion, which are more beneficial but singularly dangerous, since the mortality percentage is more than 25%, are all that have heretofore been advised. It seems from their pathogenesis and from a whole category of vaso-motor symptoms, that facial neuralgias are of vaso-motor origin. Hence nothing could be more logical than to treat them by resection of the superior cervical ganglion of the sympathetic, which furnishes the vaso-motor, not only to the branches of the trigeminus but also to its Gasserian ganglion and to its cephalic centers, in short to the whole of the nerve that is suffering. Jabouley did this successfully in one case. The author, at the instigation of Dr. Abadie, did it in the case of a man sixty years of age who had had an extremely rebellious, grave and progressive form of facial neuralgia for thirty-three years; it was most marked in the superior maxillary region. Everything had failed to cure it opium and quinin sulphat among the rest. Forty-eight hours after the operation done by the author, the patient had ceased to suffer, feeling only a trifling, insignificant sensation of warmth in the gums. One such case proves that the vaso-motor theory of the etiology of the disease is well founded. The wound being in the neck, not on the face, is of less cosmetic importance. The author is pleased with the results of about fifty resections of this kind that he has done.

Medullary Anesthesia by the Injection of Cocain—Tuffier's Method.

□ (*L'anesthésie medullaire par l'injection de cocaine, procede de Tuffier*).

DR. STOUFFS, Nivelles, *La presse médicale Belge* 14 October 1900.

The author describes his experience with Tuffier's method of producing general anesthesia by injecting from a gram to a gram and a half of a two per cent. solution of cocain into the subarachnoid space, the needle being inserted opposite the articular process of the fourth lumber vertebra. The method has been used by this author in thirty-one operations in about four months immediately following the 21st of June, 1900. The operations are named and include hysterectomy, laparotomy, the treatment of strangulated hernia and the like. No risk of wounding the spinal cord is run, since the cord ends three vertebræ above the point of puncture. The needle alone is first inserted and is known to be in the proper place by the

escape, through it, of the arachnoid fluid. This is essential. Unless the cocain reaches the medullary canal, no anesthesia results. A few minutes later the patient feels a creeping sensation in the lower extremities, sometimes feels nauseated, occasionally vomits, but such annoyances are only transient, not lasting. Sometimes the vomiting comes on late, toward the end of the operation. Generally the pulse-rate increases very rapidly to 120 or 140, to decrease as rapidly to the normal. Oftentimes there is profuse perspiration. During the day following the operation, the patient's temperature may rise as high as to 102° F., but this is only temporary. There may be a headache of a few hours' duration. Insensibility is complete in ten minutes after the injection; the skin may be cut, oftentimes, within four or five minutes. The patient retains enough feeling to know when he is touched, but has no pain. The anesthesia lasts about half an hour. The author has had no serious accidents with the method.

BACTERIOLOGY

Edited by A. J. Lartigau, M. D.

The Bacteriocidal Action of Methylene Blue.

CHALEIR-VIVI, *Comptes rendus de la Société de Biologie*, No. 25, 1900.

Stimulated by the excellent results obtained with methylene blue in gynecological practice the writer undertook some experiments to ascertain how far the good results were attributable to its germicidal action. For the tests the staphylococcus pyogenes albus, streptococcus, bacillus coli communis, and bacillus subtilis were utilized and methylene blue in concentrated aqueous solution. As a result of his experiments he concludes that methylene blue, in saturated solution or even more dilute mixtures (ten drops to ten cubic centimeters of liquid culture) arrests the development of bacteria ordinarily found in the vagino-uterine passages. Methylene blue had no inhibitive effects on the growth of the bacillus subtilis.

The Bacteriology of the Upper Portion of the Alimentary Tract and its Relations to Surgical Intervention.

CUSHING AND LIVINGOOD. *Contributions to the Science of Medicine, Welch's Festschrift*, 1900.

The importance of an exact knowledge of the bacteriology of the intestinal canal has long been apparent, but since the introduction of gastric and intestinal surgery on a larger scale the subject has assumed new relations and wider proportions. In an experimental and surgical study of this question, with particular reference to the establishment in the small gut of an amicrobic state as a preliminary to operative procedures on the stomach and small intestine, Cushing and Livingood obtained results which may be summarized in the following conclusions:

1. In the upper part of the intestinal tract the bacterial flora is more scanty than in the lower portion. No definite varieties of microorganisms seem to be constant elements of this flora, which is apparently dependent upon the bacterial features of the ingesta for its characteristics.
2. Some pathogenic varieties, especially streptococci, most readily escape

the antiseptic properties of the gastric juice, which is at best limited to its germicidal action.

3. At the terminal stages of digestion, and especially after a fast, it is difficult to recover micro-organisms from the mucous membrane of the stomach, duodenum, and even of the jejunum as far down as complete emptying of the canal has occurred. It is therefore of importance by sterilization to rid the food of bacteria, especially of such forms as streptococci, preliminary to operative procedures; and also to insure a condition of emptiness in the upper part of the digestive tract.

4. As peritonitis following intestinal wounds, operative or accidental, is dependent for its characteristics upon the bacterial flora of the canal at the site of the lesion, the prognosis of such conditions will be favorable proportionately with the scarcity and innocuousness of the micro-organisms which are present.

Appendicitis Incited by the Bacillus Pyocyaneus.

COYNE AND HOBBS. *Comptes rendus de la Société de Biologie*, No. 24, 1900.

Many reports of the last few years go to show that the bacillus pyocyaneus belongs side by side with the more common pyogenic cocci with respect to the considerable variety of lesions which may be incited by it. The authors have just reported an interesting case of appendicitis in which the bacillus of the blue pus was isolated from the diseased appendix of a young woman, twenty-four years of age. The clinic history of the disease presented no noteworthy features. The bacillus coli communis was likewise obtained from the inflamed surface of the appendix. Animal experiments proved the bacillus pyocyaneus to be quite virulent, whereas the colon bacillus produced no untoward effect in an inoculated rabbit.

CLINICAL PATHOLOGY

Edited by Arthur W. Elting, M. D.

A New Method of Diagnosis of Pulmonary Tuberculosis. (Nouvelle méthode de diagnostic de la tuberculose pulmonaire.)

JAIME FERRAN, *Zeitschrift für Tuberkulose und Heilstättenwesen*. Band 1, Heft 3, 1900.

Ferran states that in a communication made by him two years ago he called attention to the fact that in ulcerations of tuberculous lungs there existed side by side with the virulent tubercle bacillus a saprophytic form of the same organism. This saprophytic form possessed the power of producing large quantities of spermine with a characteristic odor. In his present article Farran describes the method which he has taken to make a practical use of this fact. His method consists in taking ten cubic centimeters of sheep's blood serum in a sterile wide mouth glass (he used a liqueur glass). To this ten cubic centimeters of serum he adds three or four cubic millimeters of the suspected sputum. This is gently shaken in the serum, and the mixture is allowed to stand uncovered simply on a table in summer; in winter on top of the thermostat. At the end of

thirty-six hours, or sometimes before, one can already distinctly smell the odor of spermine, and this is found only in case the sputum is tuberculous. The author proposes to use this method particularly in cases where microscopical examination fails to discover the tubercle bacilli, but where the clinical evidence is suspicious that tuberculosis is present.

Artificial Albumoses. (Albumoses artificielles.)

DR. PAUL CORNET, *Le progrès médical*, September 8, 1900.

For several years chemists, especially the Germans, have tried to induce doctors to nourish their patients by the use of meat-powders, partially and artificially digested or transformed, that are called albumoses. Dr. Cornet finds the expression of his own views on the subject in a communication to the medical society of Munich by Dr. Voit, son of the Voit whose physiological works are so highly and generally esteemed. Voit said that the albumoses are useless and ineffectual. Their nutritive value is not greater, at least, than that of albumen; they cause intestinal irritation. His conclusions are:

1. The artificial albumoses are not of great nutritive value because they are poorly resorbed and cannot be given in sufficient doses.
2. Artificial albumoses cause intestinal irritation, which fact in a certain degree makes their use legitimate, not as aliments, but as laxatives.
3. Powders of meat are superior to albumoses, nutritively. It is desirable that their use be continued and advocated; for this reason such preparations ought to be sterilized and freed from organoleptic objections that have brought some of them into exaggerated discredit.

The Chemical Constitution of the Blood in Pernicious Anæmia. (Die chemische Zusammensetzung des Blutes bei perniciöser Anämie.)

FRANZ ERBEN, *Zeitschrift für klinische Medizin*, Band 40, Heft 3 and 4.

The writer briefly discusses the chemical analyses of the blood hitherto published and calls especial attention to the very few cases in the literature in which chemical examinations have been made of the blood in diseased conditions. Of the analyses reported many are incomplete, and the writer emphasizes the necessity of the chemical analysis, not only of the blood as a whole, but also of the red corpuscles and of the plasma.

He reports a typical case of pernicious anæmia occurring in a woman of thirty-seven years from whom it was possible to obtain a short time before death a sufficient quantity of the blood to conduct a careful, chemical analysis.

As a result of this analysis he finds that in pernicious anæmia there is:

(1) A decrease in the total quantity of proteid, which is due to the fact that the albumin in the serum is diminished, while that in the blood corpuscles is reduced to a fourth of the normal.

(2) As regards the different albumins the fibrin is absolutely diminished but is relatively normal. The albumin is almost normal and there is a marked diminution of the globulins. Assuming that the globulins are developed from the albumin the writer believes that this diminution may

be explained by the impaired absorption of proteid substances resulting from the diseased gastro-intestinal tract.

(3) The fat is present in normal quantity. The cholesterin is normal. The lecithin is diminished in the blood as a whole, but is increased in the red corpuscles.

(4) The watery extracts are diminished in the blood as a whole while the alcoholic extracts are increased.

(5) The ash is increased, which is probably due to the fact that the serum containing less proteid is richer in ash.

(6) As to the constituents of the ash the Na_2O and the Cl are increased. The CaO and MgO are also increased. The K_2O and the P_2O_5 are diminished. The iron is diminished in the blood as a whole. The serum, however, contains iron, and the red corpuscles contain more iron than normal. The amount of hæmoglobin figured from the content of iron exceeds the proteid of the red corpuscles, from which it follows that either the hæmoglobin in pernicious anæmia contains more iron than normal, or that the red corpuscles contain iron combined in a different manner, possibly both are the case.

PAEDIATRICS

Edited by Henry L. K. Shaw, M. D.

A Contribution to the Knowledge of Scarlet Fever and Measles. (Ein Beitrag zur Kenntniss des Scharlachs und der Masern.)

DR. JAROSLAV ELGART. *Wiener klinische Wochenschrift*, No. 38, 1900.

The author takes the ground that infection in scarlet fever and measles takes place through the respiratory tract and not through the skin and that the angina and rhino-conjunctivitis are not complications of the disease but the cause of it. The infection spreads from the throat and involves the lymphatic glands of the neck and then the entire system.

He claims that if the local throat affection is treated the further course of the disease will be hindered. The unknown infectious agent in these diseases is inhaled with the dust and lodges in the respiratory tract. He therefore decided to disinfect the respiratory tract and especially the nose and throat. This was accomplished by means of inhalations for which the following solutions were employed: lime water, three per cent solution, baracic acid solution, iodine trichlorate one twentieth of one per cent solution, and a three per cent sodium chlorate solution.

The children inhaled the solution for five minutes twice a day. He had some remarkable results. Since 1897 there have been no outbreaks of these diseases in a hospital where it had been almost endemic. From his experience he feels justified in claiming that epidemics of scarlet fever and measles can be cut short by inhaling disinfecting fluids, provided the epidemic and intensity of the infection is of a mild type.

He thinks it is a sure and much easier method than the old treatment of isolation. Chief attention is paid to the catarrh and throat affection. This therapy is analagous to the surgical treatment of an affected wound where you would pay most attention to the local affection and not leave it and try to overcome the general infection by the use of internal remedies.

ALBANY MEDICAL ANNALS

Original Communications

ADDRESS.*

By HERMON C. GORDINIER, M. D.,
Professor of Physiology, Albany Medical College.

Gentlemen:—The Faculty of the Albany Medical College have conferred upon me the honor of welcoming you in this old amphitheatre to a carefully prepared and scientific course of instruction in all departments of Medicine and Surgery, and I can assure you, gentlemen, that it is indeed an honor as well as a great pleasure to be able to introduce you to a systematic course of study in preparation for your entrance to this noble but arduous profession.

It is our earnest hope that you have come thoroughly rested both mentally and physically, with your minds full of activity and ready for thought, so that you will seize upon your work with a love, a zeal and a perseverance that will lead us to know you are anxious of obtaining a positive knowledge of the science and art of Medicine, and that you appreciate fully the high and noble character of the profession which you are desirous of entering. We also hope you will not only be satisfied to do the work which is before you, but that you will strive to do even more work than is expected of you; that each and every one of you will do some original work which when contributed to medical science will aid suffering humanity and thus elevate you to dignity and rank in your profession and do honor to your *alma mater*.

*Introductory to the seventieth session of the Albany Medical College. Delivered September 25, 1900.

As I look upon the new faces gathered here to-day the question naturally arises, what motive led you to select Medicine as your ideal; a study that requires the most careful preparation, the most painstaking observation, together with hours of tedious and difficult labor and with no inconsiderable risk to your health. If from a mercenary or purely business standpoint with the hope that you may obtain wealth and lead a life of ease, you are at the outset committing a grave error and you do well to retrace your steps, thus saving your time and money, and turn to seek your livelihood in another direction. If on the other hand, you have in your hearts a deep love for the work in this field and have the courage and fortitude to withstand its many sacrifices and hardships and are willing to be constant students, keeping abreast with the progress of the times, you have done well and your reward will be proportionate to your perseverance and ability to do hard work.

We hope that you have come well prepared, with a good, general knowledge of the elements of science and subjects of general learning, together with a thorough training in one or more branches of the natural sciences, a knowledge of the latter being almost indispensable to the student of medicine. The study of natural history, more than any other department of science, disciplines and enriches the mind, and creates the habit of careful observation, of seeing, of recognizing what one sees, of discerning slight differences, of collecting facts and building up hypotheses, of excluding these hypotheses if from the association of facts they do not fit, of differentiating between objects closely allied, of properly classifying the various objects in nature and identifying each individual object, thus referring it to its natural order, genus or species. The student well trained in the natural sciences knows that they are the most perfect embodiment of truth and the ways of getting at the truth and has acquired the habit of patient, diligent and accurate study. He knows the value that comes from observing the slightest differences in the recognition of the various objects in nature. He is always eager after truths and is equally vigorous in discarding untruths. He is able, depending on their import, to accept or cast aside the innumerable theories presented in a course of medical instruction, for he possesses a receptive and analytical mind and is accustomed to independent thought and

original investigation. If there are any among you who have no knowledge of the natural sciences, let me advise your taking up the study of mineralogy, zoology or botany, or any one of the various departments of natural history for recreation or as an accessory to your medical work. I am sure you will never regret the amount of time spent, for you will be well repaid both in the knowledge obtained and the pleasure and profit derived, in addition to the advantages gained from the training of your powers of observation, which will not only facilitate and make easier your primary medical studies, but will stand you in good stead, when in your third and fourth years, you are brought face to face with patients, and are obliged to concentrate to the utmost your powers of observation in learning to recognize, to differentiate, to predict the course of and to treat disease. Such study, which is an education of itself, will not interfere with your medical work but will broaden your minds and render more accurate your conceptions of the facts as they are presented to you, during this course of medical instruction. Adhere to the advice of Goethe as expressed in the following verse:

“ Let him look round him, standing without fear,
The world speaks plain for who has ears to hear;
He need not stray within the vast to-be
But clasp what he can feel and see.”

Those of you who have read the life of John Hunter, the famous anatomist and surgeon and recognized as one of the masters of medicine, will recall these words from the pen of Sir James Paget which illustrate forcibly the value of a scientific training. If we try to find in Hunter's mental character the facts to which may be ascribed his great influence in the promotion of Medicine and Surgery, I think it may justly be assigned to the degree in which he introduced the exercise of the observant scientific mind into the study of and practice of Surgery. In his own mind the chief attraction to science may be traced in his love of collecting ; he collected everything. Through him Medicine and Surgery came to be practically studied in the light of all sciences. He was one of the few rare men to whom the love of and carefully observing the course of nature is sufficient for the motives and safe methods of scientific study. He was a naturalist of high rank, a splendid anatomist and a great surgeon.

Acquire early the habit of punctuality ; promptness in the laboratory, in the lecture room, at conferences or at the bedside is of inestimable value to the student, and is a virtue easily obtained and about which many are so exceedingly careless. Nothing pleases the teacher more than to have all the members of his class in prompt attendance at the beginning of his discourse, and how chagrined he is when interrupted by one or more tardy students who have already acquired the habit of procrastination !

Cultivate the habit of being positive about things which you know and equally positive in discriminating those that you do not know. When problems are presented to you for solution, either during your recitations, quizzes or examinations, never hesitate to state boldly the facts when you know them ; but be equally bold in saying no to those with which you are unacquainted. Depend not upon your neighbor to the right or left, in front or behind you, to whisper in your ears the appropriate answers, remembering always that they are as apt to be incorrect as correct. Under no circumstances give unqualified assent to those things which you are not sure of, because you inculcate the pernicious habit of deceiving yourselves, a habit which is sure to grow with age and will cling to you very tenaciously through life.

I wish to dilate upon the importance of a most thorough knowledge of the three fundamental branches of Medicine, and give a slight review of their development. I refer to Anatomy, Physiology and Pathology. Anatomy which treats of the structure of the human body, Physiology of the functions of the various organs and tissues of the body and Pathology which treats of disease of both structure and functions.

There is a tendency on the part of many medical students not only in this but in most medical colleges to underrate the value of these primary studies, which form the very foundation upon which their medical education is to be based. Such subjects ought not be approached from the standpoint of an examination to be passed or high quiz marks to be attained, but leaving the examination and marks out of consideration the whole aim of the student should be to obtain complete mastery of each subject, a knowledge of which will not fade, but will be indelibly impressed upon the mind of the student so as to be recalled when occasion demands. Such a knowledge is not to be obtained

in a day nor by spasmodic or passionate outbursts of study in preparation for a quiz or examination, but by steady, hard work with the mind concentrated on the subject at hand and a determination to become master of it. With such a knowledge of these subjects there will be no fear or trembling when examination time arrives, and the unwholesome system now in vogue by many students in most of the colleges of devoting hours, yes, days of special cramming, preparatory for examination, will fast disappear, as the knowledge thus gained from day to day will assume part of their own mentality being ready for use whenever the necessity arises.

Of the fundamental branches Anatomy naturally attracts our attention because of the importance attached to it by the great masters in connection with the study of Surgery and Medicine. It is to the study and development of human Anatomy that Medicine and Surgery owe in large part their present high standard of attainment. The remarkable strides made in Pathological Medicine and the present high position of Pathology has been entirely due to the development of general Anatomy, and these two subjects must ever advance hand in hand. Anatomy occupies such a prominent position in the science of Biology that it must ever attract the student who has shown a fondness for natural history. He finds in it a subject though difficult and at times exceedingly irksome, one the study of which in all its details will not only improve and cultivate his mind, but develop to the utmost his powers of observation, and lay the foundation for his future in Medicine. Without such a knowledge of Anatomy one cannot hope to understand Physiology which is connected with the normal workings of the various organs and tissues of the body, or can he hope to master Pathology which treats of the abnormal changes which occur in the various tissues and organs of the body incident to disease.

The study of Anatomy has been pursued from earliest antiquity. Hippocrates, who is acknowledged by all to be the father of Medicine, was supposed to have created the science of Anatomy. But it was not until the time of Aristotle, 400 years, B. C., that any accurate knowledge of this science existed. This was founded upon the dissection of some of the lower animals, thus establishing in reality the study of comparative Anatomy. Aristotle recognized the wind-pipe as being an air holder, and

distinguished it from the œsophagus because of being located in front of it and because cough and suffocation was immediately induced when food or drink entered it. He knew that no communication between the stomach and lungs existed. He had a tolerably clear conception of the location and shape of the heart and was aware that the large blood vessels were given off from it. He represented the organ as being full of blood and speaks of the blood flowing from the heart to the veins and thence to all parts of the body. He seems to have a fairly accurate notion in regard to the diaphragm as well as the whole alimentary canal and related organs. Aristotle did not discover the peripheral nerves but believed the brain to be an instrument for cooling the heart. He regarded this latter as the seat of the soul or as we at the present time would say, the mind.

It was not until the founding of the Alexandrian School, 320 years B. C., by Ptolemy I., that students were permitted to dissect the human body. Herophilus and Erasistratus were the first physicians to dissect and describe the parts of the human body. Herophilus first described the peripheral nerves and believed them to be connected with the brain, and spinal cord and to convey sensory impressions. He recognized the nature of the pulmonary artery, which he named arterious vein, and first gave the name twelve inch, or duodenum, to that part of the intestine connected with the stomach. It was he that named the linear furrow at the bottom of the floor of the fourth ventricle, "calamus scriptorius."

Erasistratus discovered the valves of the heart, and named them tricuspid and sigmoid; he studied the shape and structure of the brain and recognized the cavities and surrounding membranes. Erasistratus believed that the air underwent a change in the lungs, and thus altered passed to the heart, there becoming further changed and thence travelled to the brain where in the ventricles it was converted into pneuma or animal spirit.

Celsus was acquainted with the wind-pipe, lungs and heart, and described the position of the liver, spleen and stomach; he did not recognize the twelve inch bowel previously described by Herophilus, but believed the stomach to be directly connected with the jejunum.

Of the authors of antiquity, no one so well deserves the title of Anatomist as Galen, the celebrated physician of Pergamus.

born the one hundred and thirtieth year of the Christian era. He was educated at Alexandria and Pergamus. He named and described the bones and sutures of the skull almost as accurate as at the present time. He also named most of the bones of the face and gave the first clear account of the number and position of the vertebra. Although Galen seems to have devoted most of his time to Osteology, in Myology he did considerable work, for he named and described a frontal muscle, six muscles of the eye, a muscle to the *ala nasi* and four muscles attached to the lips, the masseters to move the jaw from side to side and two depressors. Galen, while accepting the theory of Erasistratus that the blood vessels contained air, proved by actual experiment that air was not their only contents, that they also contained blood and that probably the *pneuma* or spirit was also mixed with the blood.

The following simple experiment made by Galen led to this important discovery, namely, that the nerves are the source of muscular contraction: he simply divided in an animal the fifth spinal nerve and found that all movements were lost in the muscles of the shoulder supplied by that nerve. He believed the brain to be the origin of the sensory and the spinal cord to be the origin of the motor nerves. His knowledge of the brain was derived from dissection of the lower animals and many of his descriptions have been retained by modern anatomists.

With the death of Galen at the ninetieth year of his age, took place the downfall of Anatomy in ancient times and it was practically forgotten until the commencement of the fourteenth century when Mondino elevated it from its chaotic state. He dissected human bodies and demonstrated the different parts. Through his efforts provision was made by the Universities that one body at least should be dissected each year. He described very accurately the position and anatomy of the heart, and it seemed that he understood the rudiments of the circulation, although he retained the old idea that the left ventricle contained *pneuma* or spirit which it generated from the blood.

From the time of Mondino to William Harvey but little advance was made. It was in 1619 that this brilliant Englishman announced his famous discovery of the circulation of the blood, and although assailed from every standpoint and exciting many bitter controversies, it soon became generally accepted and

marks the beginning of our modern conception of anatomy. In 1656 Thomas Willis published his researches on the Anatomy of the Central Nervous System, which completely revolutionized the study of this important subject. He was the first to number the cranial nerves in the order in which they are at present taught. He believed that the brain was the chief seat of the rational soul in man and of the sensitive in brute beast; that it was the chief mover in the animal machine, and was the origin of all motions and conceptions.

When attempting to explain the reason why the surface of the brain is thrown into convulsions, he gives our first spark of that all-important branch of Neurology, the localization of cerebral functions. His language is as follows: "For as the animal spirits for the various acts of imagination and memory ought to be moved within certain and distinct limits or bounded places, and these motions to be often repeated through the same tracts or parts, for that reason these manifold convolutions and infolding of the brain are required for these divers manners of the animal spirit, to wit: that in these cells or storehouses severally placed might be kept the species of sensitive things and as occasion serves may be taken from thence."

From Harvey and Willis' time to the present both general and regional Anatomy have been thoroughly studied and developed, until to-day this science is practically exhausted. A text-book of general Anatomy then represents the labors of hundreds of investigators scattered over more than twenty centuries and while containing many facts which appear dead, yet the development of each has been the fruit of years of devotion and toil. We ought, therefore, to approach Anatomy with much respect and veneration as the way has been opened and it only remains for us as students to reap the reward of their lives' work.

As we have seen Anatomy has been developed by many workers through centuries of study. Physiology, on the contrary, has been developed by comparatively few investigators within the present century, and as the development of Surgery has been dependent largely on the progress of Anatomy, so Clinical Medicine has stood in direct relation to the progress of Physiology. In fact, these two subjects are so closely related to each other, that the study of some diseases has resulted in our modern conception of the physiological functions of certain organs which

hitherto remained in much obscurity, such, for example, as the relation between myxœdema and the thyroid gland. On the other hand experimental physiology has led to our modern ideas of the etiology and pathology of many diseases of the various glands of the body, particularly the liver, pancreas, spleen and kidneys.

The very intimate association between Clinical Medicine and Physiology is well exemplified in that department of the science designated Neurology. While the progress of Neurology is in part due to a more clear conception of our ideas of the Anatomy of the nervous system, its origin and the wonderful development made in this department during the past few decades have been entirely due to physiological experimentation. How important, then, as well as extremely interesting is the study of this branch of Medicine, without a knowledge of which we cannot hope to grapple with disease, which is nothing more or less than deranged physiological functions.

Modern Physiology may be said to date with the beginning of the researches of Sir Charles Bell in 1811. This keen observer, believing with Galen and Willis that nerves of sensation and motion must exist, was not satisfied until he had actually demonstrated by experiment that motion and sensation were subserved by two distinct forms of nerve fibres. He laid bare the roots of the spinal nerves and irritating them, discovered that it was the anterior pair, which gave rise to muscular movements, and not the posterior, hence he was sure that the anterior roots were motor and believed from the negative results of irritation of the posterior roots that they were probably sensory. This discovery that the spinal cord conducted motion and sensation both being subserved by separate and distinct nerve fibres, was the first link in the chain of evidence toward the establishment of the doctrine of localization of function, a doctrine which although almost forgotten until 1870, was revived and further extended by Fritsch and Hitzig, who by electrical excitation of the cerebral cortex, were enabled to throw into action groups of muscles governed by certain distinct localizable cortical areas. These experiments were confirmed and extended by Ferrier in 1873 and Munk in 1881 and by Hughlings Jackson's clinico-pathological studies, until at present the doctrine of cerebro-spinal localization has been established on a truly scientific basis

and has resulted in a complete revolutionization of our conception of the anatomy and physiology of the central nervous system.

The high position which physiology occupies at the present time is in large part due to the investigations of two pioneer workers—Claude Bernard and Hermann Von Helmholtz, and to them is due the credit of having elucidated many of the perplexing scientific problems connected with physiology. Most of our knowledge of digestion, particularly the intestinal form, is due to the labors of Bernard. It was he who first made practicable the pancreatic fistula by means of which he was enabled to study its secretion and to demonstrate that the functions of the pancreas were to emulsify and to split up fats into fatty acids and glycerine; to convert carbohydrates into sugar and to render assimilable albuminoids or proteid food-stuffs. Close in the wake of this discovery searching for the ultimate destination in the body of the carbohydrates he was led into the discovery of the glycogenic function of the liver, which remains one of the most brilliant achievements accomplished by any person in physiological research.

Not only in the field of the physiology of digestion did Bernard work, but while studying the secretion of the submaxillary glands he found that irritation of the chorda tympani nerve was followed by dilatation of the blood vessels to the gland, which on the contrary were contracted by irritation of the sympathetic nerve fibres. He had, in other words, discovered that the function of the vaso-motor nerves were to control the calibre of the blood vessels. Bernard's idea of the vaso-motor action is, to use the words of Foster, woven as a dominant thread into all physiological and pathological doctrines of to-day; attempt to draw out that thread, and all that would be left would appear as a tangled heap.

No less remarkable and epoch-making have been the researches and contributions to physiology by Helmholtz. From 1844 to 1848 his time was mostly occupied with the subject of animal heat which he brought from the unsettled and chaotic state in which it was, to the scientific position which it now occupies. In 1850 he measured the rate of nerve impulses. This achievement he accomplished by an ingenious electrical appliance constructed by him by his friend and colleague Dubois Reymond. He found

that the rapidity of nerve impulses along the course of the motor nerves of a frog were ninety feet per second and the rate of the impulses along the course of the sensory nerves of a man were from 160 to 300 feet per second.

The discovery in 1851 of the ophthalmoscope by Helmholtz was an achievement truly wonderful and one which has been of very great benefit to suffering humanity because it has opened the way to the accurate study of the normal appearances as well as the pathological changes which occur in the retina, the result of local or general disease. To the general practitioner as well as the specialist this instrument has been of inestimable value as a means of assistance in distinguishing certain diseases. No less important and far reaching were his researches on color vision and the mechanism of accommodation. To the names of Bernard and Helmholtz many others might well be added, but it may with truth be said of most of them that their work has been largely an elaboration and extension of the work of these two men.

The value of the study of anatomy and physiology to the student of medicine is to thoroughly acquaint him with a knowledge of the normal appearances and functions of the various tissues and organs of the body, while the study of pathology teaches him the appearances of those same tissues and organs in disease as well as the deranged functions incident thereto. Hence the relation of pathology to medicine cannot be overestimated, as our knowledge of disease is intimately associated with its development and progress. It is, indeed, associated with the growth of every department of clinical medicine and surgery as its study has shed a flood of light in regard to causation, the production of symptoms, the duration and course of, as well as furnishing data for rational treatment and prevention of disease. To be able to explain from a knowledge of pathology the causation of the existing symptoms in a given case of disease, as well as to be able to foreshadow its course and its probable termination, and to institute a positive line of treatment, is a feat that any student should be proud of and one which all students should be eager to acquire.

This science, which is as old as Galen, really has only been developed since the publication of Virchow's celebrated work in 1859 on cellular pathology. From the time of the appearance of

this book until the present, pathology has progressed with a rapidity unknown to any other department of medicine, and from its study several special branches have been developed such as bacteriology, clinical microscopy and hæmatology. The study of bacteriology alone has been attended with wonderful discoveries in regard to the exact causation of the specific and epidemic diseases for it has shown that with but few exceptions such diseases are occasioned by certain specific micro-organisms, a knowledge of which fact has enabled us through the institution of proper hygienic and medicinal treatment to prevent, to shorten the duration, and cure disease, thereby reducing to a minimum the mortality rate. It is in the field of Surgery, however, that bacteriology has doubtless been fraught with the greatest benefits to mankind. Its study has been attended by a gradual development of surgical technique which at present is well nigh faultless and in consequence of which surgical operations have been elevated from a position of great risk and uncertainty to one of almost complete safety. Before the advent of the microscope and the examination of the blood, excretions and secretions, clinicians were obliged to diagnose disease from observation alone, and without discouraging in the slightest their methods, because at the present they are of the greatest importance, it is safe to say that in many instances their conclusions were at best highly probable but not absolute. Bacteriology and clinical microscopy, however, have inaugurated a great change, for at the present we are able to positively diagnosticate a great many diseases at their inception by a careful examination of the blood, the excretions or secretions.

If in tracing in this rather incomplete manner the development of Anatomy, Physiology and Pathology, and trying to impress you with the importance of these fundamental branches of medicine, I have instilled within you the desire to become thoroughly familiar with these subjects in preparation for your advanced work in general medicine and surgery, I shall feel amply repaid. How well this has been accomplished, you yourselves in the future can only decide.

To Illustrate Dr. Davis' Article on "Leprosy in the Hawaiian Islands."

Albany Medical Annals, February, 1901.



LEPER SETTLEMENT AT MOLOKAI

LEPROSY IN THE HAWAIIAN ISLANDS.*

By CHARLES EDMOND DAVIS, M. D.,

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On September 30th, 1898, through the courtesy of the Hon. W. O. Smith, Attorney General, and President of the Board of Health, the writer was one of a party of twenty-one, who accompanied the Annexation Commission, composed of Senator Cullom and Congressman Hitt, to visit and inspect the lepers on the island of Molokai. Semi-annual trips are made to this island by members of the Board of Health, on tours of inspection, but this was a special occasion for the purpose of allowing the Commission to see for themselves, the island of Molokai, which is a part of the United States and, in a way, one of the most interesting of our possessions. The steamer, Mikahali, which had been chartered, left the pier of the International Steamship Company, at ten o'clock in the evening. The sea was as calm as a mill pond, and no inconvenience was felt from sea-sickness. From Honolulu to the first settlement, is fifty miles, and our speed was regulated to get us there at sunrise. Looking over the rail, we saw an immense perpendicular wall of solid rock, towering two thousand feet above us. It rose abruptly from the sea and fenced off all communication with the world beyond, and, as we proceeded, the cliff increased in height until it ended in the ocean again to the north, as abruptly as it had started, over three thousand feet in height. Our palisades on the Hudson are mere hills in comparison to those of Molokai. In the distance we could see Kalaupapa, which looks like a prosperous town on the sea coast. The nearer we approached, the more metropolitan looked our little village. We climbed down the side of the steamer into yawls, and were rowed to the landing, by sturdy Kanaka sailor men. The keel grates on a bed of lava and we step out on to a natural dock formed by an arm of burned rock. At times the surf here is fifty or sixty feet high, and landing becomes extremely dangerous.

We are now in the village of Kalaupapa, one of the two leper colonies on the island. On an arch over the landing place is a large sign bearing the words "Aloha," which is the Hawaiian word for "Welcome," and as we are the first visitors there in

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six months, we know that the "Aloha" was genuine. On approaching the village square, a large flag pole came into view, and from its peak floated "Old Glory." A band composed of lepers greeted us with the "Star Spangled Banner," and after the bustle of landing had abated, we were escorted to the "guest house" in the heart of the village. As we entered the enclosure and seated ourselves on the porch, it seemed as if the entire population must be crowded about the neighboring fences and porches. Here we were safe from contact with the lepers, as none of them are ever permitted to enter the guest house. The Chief of Police, wearing a great oval badge, was selected by Judge Smith as escort, and after half an hour spent in laying out our program, during which time the business of the Health Commission was completed, we started to inspect the town. The site is probably one of the most suitable which could have been chosen for the purpose. It is surrounded on the north, east and west by the sea, and the base, or south side, is situated beneath a precipice from one thousand to three thousand feet high, which discourages communication with the rest of the island. Near the center of this tongue of land is the extinct crater of Kahukoo, four hundred feet above the sea level. The plain has an area of eight square miles, and its breadth at the base is two and three-fourths miles, at the center two and a half miles, and northward about one mile. The soil is composed of lava rock, disintegrated lava, and ocean sand, and, like most soils of volcanic origin, is very fertile.

The first settlement was at Kalawao, on the eastern side of the island. It lies close in to the mountains, and is much exposed to the trade winds. Kalaupapa, the larger settlement, is situated on the plain to the westward, and is protected by the crater of Kahukoo. The shore on the eastward is difficult of access. No trees originally grew on the plain, and only coarse grass on the Kalaupapa side. A bold and rugged mountain range, which shuts off the settlement on the island side, is continued east and west the whole length of the island, reaching toward the eastward an elevation of two or three thousand feet. Adjoining are the valleys of Waikolu and Waiihaau. Water is supplied from the Waikolu valley, storage reservoirs being placed at different points as a reserve, in case of accident to the main supply. The site was chosen in 1865, and the settlement opened the following year. Here the hospital and home for lepers were first erected.

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Figure 1

Figure 2

When the settlement was first opened, much difficulty was experienced from persons who owned parcels of land and who were called "Kaimainas," or "old settlers," their influence being detrimental to the discipline of the place. Communication with other parts of the island was maintained by climbing the trail at the rear of the settlement. Molokai is probably the most complete settlement of its kind in the world. It has stores, markets, dispensaries, and cottages for the leper residents. The majority of the lepers live in cottages, and in the settlement there is a total number of seven hundred and sixteen buildings.

The lepers are supplied with liberal monthly rations by the Government: beef, 7 pounds; salmon, 5 pounds; fresh fish, 7 pounds; *pai ai*, one bundle of 21 pounds net, a native food prepared from *colocasia esculenta*, and often called "poi;" rice, 9 pounds, with one pound of sugar; bread, 8 pounds, with one pound of sugar; and flour, 12 pounds, with one pound of sugar. Monthly rations of soap, matches, and kerosene oil are also issued. Every one outside the home receives a clothes ration order, to the value of five dollars every six months, on the first of January and July. Many of the lepers have friends who supply them with clothes and money. The Bishop Home for leprous girls, and the Baldwin Home for leprous boys, draw their supplies directly through the Board of Health. The cost of the settlement for segregation and transportation of lepers, and the maintenance of the receiving station at Kahili is about \$90,000.00 per annum.

Our first visit was to a group of buildings that comprise the Girls' Home. It is in charge of Sisters of Charity, who came to this place from Syracuse, N. Y., and who will remain here until death takes them to their reward. Many of the people seen about the streets, have no visible evidence of the disease, but as we enter the houses of the Girls' Home, we are brought into the presence of the most hideous beings ever seen. One hundred and thirty-nine women and children are numbered in this institution. As one enters, all who are able try to hide, being ashamed of their condition. Their ages range from five to fifty years. On every hand are seen ravages of the disease. Squatted on the floor was an old woman, and we estimated her age to be about seventy years, but the Mother Superior, who escorted us, told us that she was but thirty on her last birth-day. Not a finger remained on either hand, and her face was covered with nodules and ulcers,

from which pus could be seen oozing constantly. The skin was not hard, but puffed and congested. The lobes of the ears were greatly elongated and frequently had to be cut off for the comfort and convenience of the patient. An especially pathetic sight was a little Swedish girl about twelve years of age, who was sent to the Home six months before, upon whom the disease of leprosy was not perceptible. She was questioned about her ancestors, but all the information she would give was that she was happy and experienced no pain. She was especially noticeable from the fact that she was white.

We inspected the two tanked bath houses and the mess hall with its long tables; then we went to the girls' room, where the good Sisters teach inmates to operate the new Home Machines, and make all the clothing for the colony; from there we proceeded to the school, where daily the young are taught, and graduated only after they have acquired a good English education; finally we visited the chapel, where we were greeted by an anthem by a choir of lepers accompanied by a young girl, on a cottage organ. Despite the sweetness of their voices, there was something that conveyed the impression that sadness and despair predominated. After our visit to the Home, we proceeded to the entrance gates, and were met by a cavalcade of lepers leading extra ponies. These ponies were turned over to our use, and after adjusting ourselves in the saddle, headed by an escort of lepers, we started on the ride to Kalawao, the oldest settlement, two and a half miles away. The road from Kalaupapa to Kalawao is practically a lava bed, rounded off, straight and well kept. On either side, we passed the cottages of the colonists, and were it not for the horrible faces along the road, one would imagine himself in a picturesque village of the sub-tropics.

We ascended a little knoll and halted at the top. An old man, an Englishman, was sitting on the porch. Judge Smith greeted him with a "good morning" and introduced Congressman Hitt and several others. After telling our Senator and Congressman that he had often heard of them, he plied question after question about the annexation of the islands, whether it was a war measure etc., which showed him to be well read in politics. After answering the questions, Mr. Hitt asked him if there was anything he could do for him. The old man replied, "Yes, send me a boat load of American flags and make every one six yards long." Here,

in this leper colony, where none enter but to stay till death, Old Glory is in demand, and by an Englishman at that! Had the old man stood behind a screen while talking, he would certainly have been taken for some old sage, interested in the welfare of his country; but as it was, he stood there before us with fingerless hands, bloodshot eyes, and in all, a sight repulsive to look upon. He was visibly pleased with our visit and bade us come again.

Our little cavalcade started away at a gallop and soon we saw before us, in a little valley, the village of Kalawao, the older of the two leper settlements on the island. Judging from the crowd that filled the road in front of the church, the word that our party had arrived must have reached the ears of the colonists. A crowd of fully five hundred was there to greet us. Our guide conducted us into an enclosure and, dismounting, we turned our horses over to the lepers, who seemed anxious to serve us. We were then introduced to Brother Joseph Dutton, Superintendent of the Baldwin Home for boys. This institution is the gift of Mr. H. P. Baldwin, the "Sugar King" of the Hawaiian Islands, a man whose philanthropic deeds have made him beloved by all the natives. We were invited to inspect the Home, and did so under the escort of the devoted Brother.

The cases of leprosy seen at Kalawao are far worse than those at Kalaupapa. It was difficult to realize that some of the lepers were human beings, so greatly were they disfigured by the ravages of the disease. The institutions at the Baldwin Home were about the same as those found at the girls' home at Kalaupapa. There were the school house, the work house, the mess hall, dispensary and hospital. At the latter place several lepers were confined, the worst cases on the island. In the hospital were three or four patients in bed, all in such advanced stages of leprosy, as to insure them an early, and what must be to them, a welcome, death. We were all glad when we had completed the rounds and repaired to the little church across the way, where we were greeted by Father Pamphile, a brother of the late Father Damien. To the memory of the latter is erected a granite monument, telling by its inscription, of the many good deeds of this "Apostle of the Lepers."

Father Pamphile gave us a warm welcome. There are three other brothers in Kalawao. There is something romantic in con-

nection with Brother Joseph Dutton. He presented himself as a care-taker of the lepers, and only by considerable persuasion would he agree to accept the small sum of twenty dollars a month. He is a native of Michigan, and refused to say anything about his past life. As yet he has not contracted the disease, but in time he will. Seeing the disease in its several stages as he does every day, he must have a stout heart to remain there, knowing that sometime he himself will be stricken. We mounted our ponies and, accompanied by a large crowd of lepers, also mounted, the return trip was begun. Our guide conducted us off the road, up a steep bridle path, and halted on the edge of a huge crater. We saw a volcano, the bottom of which was filled with bright, green water. This great, bowl-like cavity is called the "Bottomless Pit." We drove our sure footed ponies about a quarter way around the "Pit," finally striking off on a trail which brought us to the "guest house" again, where, shortly after, dinner was announced. It took considerable nerve to eat anything in that place, but, after we had made a beginning, we did that chicken dinner full justice. A quartet of lepers rendered selection after selection, in native Hawaiian. Interspersed with the singing, the native band played many familiar airs, including "Auld Lang Syne" and "Home, Sweet Home."

As we left the guest house, we were confronted by the entire population who were able to get out, and who looked expectantly into our faces as we approached. Senator Cullom and Congressman Hitt addressed the lepers, assuring them that they would have the same care and attention as the oldest citizen of the United States. At the conclusion we returned to the landing and were rowed back to the ship, with the strains of the "Star Spangled Banner" floating out to us from the band on the dock. One of the first things that strikes the visitor is the lack of classification of the patients. The management does not seem to make any effort to keep the most severe cases separated from those that show very little signs of the disease. A leper of five years will be thrown into contact with a patient who has been stricken only a few months, as in the case of the little Swedish girl. It would appear that when a patient is pronounced a leper, he must go to Molokai to die. There is practically no treatment, except as parts of the face, hands, or feet become ulcerated. There seems no good reason why greater cleanliness should not be enforced,

with some classification, and attempt at treatment of the mildest cases.

Leprosy, although an ancient disease, having survived all attempts at extermination through many centuries, is to us in the United States, comparatively new, and a disease which must now receive that careful study necessary to end for all time its ravages among the human race. The disease exists in China, Japan, India, the Philippine Islands, Siam, Africa, Egypt, Borneo, Turkey, Palestine, Spain, Portugal, France, Norway, Russia, Iceland, the West Indies, Central and South America, Mexico, Australia, and the United States. Norway is the center of affection in Europe at present, and Brunswick in Canada. Louisiana, Key West, the Scandinavian Colonies in Minnesota, Iowa, Wisconsin, California, Oregon, Texas, Utah, South Carolina, and New York also have a few cases. From these facts one might properly say that every country and every cosmopolitan center, has its lepers to-day.

The origin of this disease is unknown. While it has always existed in certain countries, its history has shown periods of increase and decrease, its rise and decline always corresponding to the number of imported cases, the hygienic and social condition of the people, and the carefulness with which those affected, are segregated. In the eighth and twelfth centuries, epidemics of the disease prevailed in Europe, but in the fifteenth century it began to decline, and by the end of the seventeenth century, was endemic. As will be seen by the table here presented, leprosy is again on the increase, or it has at least begun to show signs of widespread extension, by the invasion of new territory, within the present century. In the Hawaiian Islands, the origin seems to be as obscure as elsewhere. The fact that leprosy has existed for all time among the Polynesian race, and that the Hawaiians are descendants of the Mabian branch, who inhabit the islands lying to the south and west, goes far to disprove the theory that it was brought to the island by sailors in the days of whaling ships. In Java and other islands of the archipelago, leprosy existed before the sailors had a chance to disseminate it. There are records of intercommunication of the Hawaiians with the Chinese, as early as 1778, and with natives of other islands as early as the thirteenth century when leprosy was so prevalent in Europe. In 1798 the North Pacific whaling fleet began to visit

the Sandwich Islands, making Lahaina on Maui, and Honolulu on Oahu, their principal port of call, and it is claimed that leprosy was brought by the mixed crews of Negroes, Portugese, and Chinese.

In a report made to the Hawaiian Board of Health in 1886 by Dr. Arthur Moritz, the physician in charge of the leper settlement on Molokai, it is stated that the Rev. Charles S. Steward, one of the early missionaries in Honolulu, who came to the island in 1823, recorded the following in his diary, a few weeks after his arrival:

“Not to mention the frequent and hideous marks of a scourge which, more clearly than any other, proclaims the curse of a God of purity, it annually consigns hundreds of these people to the tomb, and converts thousands while living, into walking sepulchers.” The inhabitants generally are subject to many disorders of the skin, and the majority are afflicted with eruptions and sores, many of these people being as unsightly as lepers. The same observer notes, “Indeed, we seldom walk out, but we meet those whose misery and disease is so appalling, and some so remediless and disgusting, that we are compelled to close our eyes against a sight that fills us with horror.” Cases of ophthalmia, scrofula and elephantiasis are very common.

One missionary states that the first case of leprosy he saw in the Hawaiian group was on the island of Maui, in the year 1833, and that he heard several years before that a chieftess in Lahaina, on the same island, was affected with the disease. Dr. Alonzo Chapins wrote as follows in the *American Journal of Medical Sciences* of 1838: “Foul ulcers of many years standing, visages horribly deformed, eyes rendered blind, noses entirely destroyed, mouths drawn aside from their natural position, and almost useless arms and legs, mark most clearly the state and progress of the disease among that injured and helpless people.” The above description was intended to show the ravages of syphilis, but the cases presented are a fair description of the anæsthetic types of leprosy.

The oriental races received the credit for the introduction of the disease, long before the Anglo-Saxon missionaries arrived. The first Board of Health was organized December 14th, 1850, by order of King Kamehameha Third, to aid in the preservation of the public health, and for the cure of contagious and epidemic dis-

eases, more especially cholera. In the year 1864, the spread of the disease in Honolulu and other places on the island had raised public apprehension, and, through the persistent efforts of the missionaries, the Legislature of the kingdom of Hawaii, in 1865, enacted a law to prevent its spread. The law was as follows:

“AN ACT TO PREVENT THE SPREAD OF LEPROSY, 1865.”

“*Whereas*, the disease of leprosy has spread to a considerable extent among the people, and the spread thereof has excited well grounded alarms, and as some doubt is being expressed about the powers of the Board of Health, notwithstanding that section 302 is properly applicable to the treatment of persons afflicted with leprosy, and for the greater protection of the people,

“*Be it enacted* by the legislative assembly of the Hawaiian Islands, in the Legislature of the Kingdom, assembled:

“*Section 1.* The Minister of the Interior, as President of the Board of Health, and acting with the approval of the said Board of Health, is hereby expressly authorized to preserve and set apart any land, or portion of land, now owned by the Government, as the site of an establishment to secure the isolation of such leprosy persons as, in the opinion of the Board of Health or its agents, may spread the disease.

“*Section 2.* The Minister of the Interior, as President of the Board of Health, and acting with the approval of the said Board of Health, may acquire for the purpose stated in the previous section, by purchase or exchange, any piece or parcel of land which may seem better adapted for the use of lepers than any land owned by the Government.

“*Section 3.* The Board of Health, or its agents, are authorized to cause the confinement of persons, in places provided, who shall be deemed capable of spreading the disease; and it shall be the duty of every police or district justice, when properly applied to by the Board of Health, or its agents, to cause to be arrested and delivered to the Board of Health or its agents, any person alleged to be a leper within the jurisdiction of such police or district justice, and his deputies, and of the police officers to assist in the conveyance of any persons who are arrested to such place as the Board of Health or its agents may direct, in order that such persons may be subject to medical inspection; and thereafter assist in removing such persons to a place of treatment or isolation, if so required by the agents of the Board of Health.

“*Section 4.* The Board of Health is authorized to make arrangements for the establishment of a hospital where leprosy persons in the incipient stages may be treated, in order to attempt a cure, and the said Board or its agents shall have full power to discharge all such persons as it shall deem cured, and to send to a place of isolation contemplated in sections one and two of this Act, all such patients as shall be deemed incurable or capable of spreading the disease of leprosy.

“*Section 5.* The Board of Health, or its agents, may require from

patients any reasonable amount of labor as may be approved by the attending physician, and may further make and publish such rules and regulations as the Board may consider adapted to the condition of lepers, which said rules and regulations shall be published and enforced as in sections 284 and 285 of the civil code provided.

"Section 6. The property of all persons committed to the care of the Board of Health, for reasons stated above, shall be liable for the expenses attending their confinement, and the Attorney General shall institute suit for the recovery of the same when requested to do so by the President of the Board of Health.

"Section 7. The Board of Health, while keeping an accurate and detailed account of all moneys expended by them out of any appropriation, which may be made by the Legislature, shall keep the amount expended for leprosy distinct from the general account; and the said Board shall report to the Legislature, at each of its regular sessions, the said expenditure in detail, together with information in regard to the disease of leprosy, as well as the public health generally.

"Approved this 3rd day of January, 1865.

"KAMEHAMEHA."

On November 13th, 1865, a hospital with suitable buildings was established and opened at Kalihukai, on the island of Oahu, and distant from Honolulu about three miles. This station was designed for the reception, inspection, and treatment of persons afflicted with leprosy. Mild cases, after diagnosis had been made, were to be treated here, and the severe or incurable cases were to be transferred to the site recently purchased at Kalawao, on the Island of Molokai. On the opening day sixty-two persons were present for examination; inspection among the number revealed forty-three lepers. In 1866 (Government Report), the number of lepers of the different islands was as follows: Hawaii, 75; Maui, Molokai, and Lanai, 112; Oahu, 80; Kauai and Niihau, 7; total, 274.

There was a marked increase in the number sent to the island in 1871, 1873 and 1878. In 1881 the receiving station was removed to Kakaako, in the southwestern part of Honolulu, and on November 5th, 1865, the Queen Kapiolani Home was opened near the receiving station, for the reception of non-leprous children of leprous parents. In 1889 the receiving station was once more removed to its present situation, and not far from its original site in 1865, at Kalihi, called Kalihi-Punhali. Up to 1887 all lepers and suspects examined at the receiving station, were passed upon by one physician, but in that year, a medical board of three, was appointed. At the present time,

To Illustrate Dr. Davis' Article on "Leprosy in the Hawaiian Islands."

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Figure 5



Figure 4



Figure 3

there are six physicians on this board, and they must agree before a suspect can be consigned to Molokai. This station now comprises buildings for the reception of suspects and the treatment of lepers; and some distance from the main buildings and isolated by high palings, is the Queen Kapiolani Home for non-leprous children, which is under the charge of the Sisters of Charity.

The following table shows the mortality and number at Molokai for the period ending 1897:

	Number admitted.	Deaths.	Discharged or unaccounted for.	Number remaining.
1864	141	26	10	105
1867	70	25	7	143
1868.....	115	28	2	228
1869.....	126	59	11	284
1870.....	57	58	4	279
1871.....	183	51	9	402
1872.....	105	64	4	439
1873.....	487	156	21	749
1874.....	91	161	8	671
1875.....	212	163	14	706
1876.....	96	122	3	677
1877.....	163	129	5	710
1878.....	239	147	..	802
1879.....	125	209	1	717
1880.....	51	152	10	606
1881.....	232	132	..	706
1882.....	71	121	6	649
1883.....	301	150	15	785
1884.....	108	168	8	717
1885.....	103	142	26	655
1886.....	43	100	8	590
1887.....	220	108	4	698
1888.....	579	212	28	1035
1889.....	303	149	7	1187
1890.....	202	158	18	1213
1891.....	143	212	2	1142
1892.....	109	137	19	1095
1893.....	211	151	..	1155
1894.....	128	155	3	1124
1895.....	106	128	15	1087
1896.....	146	116	2	1115
1897.....	124	139	..	1100

The following table shows the number of cases on each island and their pronounced condition, for two years, ending December 31st, 1897, and also the number sent to the leper settlement during the same period:

From island of	Lepers	Suspicious	Not Lepers	Total
Oahu.....	71	50	20	141
Hawaii.....	100	5	2	107
Maui.....	40	14	3	57
Molokai.....	10	1	2	13
Kauai.....	19	19
Totals.....	240	70	27	337

Number sent to leper settlement during the period from 1895 to 1897: males, 165; females, 91; total, 256.

Nationalities: Hawaiians, 225; Half-caste, 15; Chinese, 9; Portugese, 2; German, 2; American, 1; British, 1; South Sea Islander, 1; total, 256. Escaped from Kalihi, 3; Sent to Japan, 3; in Kalihi at this date, 7.

Ages of lepers sent during the period from December 31, 1895, to 1897: under ten years, 10; ten to twenty years, 92; twenty to thirty years, 51.

The present census of the leper settlement, taken on November 11th, 1898, at Molokai, is as follows: leper males, 634; leper females, 439; total, 1,073.

Detail: Baldwin Home, boys, 141; Bishop Home, girls, 130; non-leprous children of leprous parents, boys, 43; girls, 18; total, 61. Helpers (kokuas), non-leprous persons permitted by the Board of Health to live in the settlement and care for leprous relatives, etc.: males, 37; females, 36; total, 73. Non-leprous priests, sisters, brothers, etc., 61. Total number of all persons at the settlement November 11, 1898, 1,207.

Up to 1865 no restrictive measures for the suppression of leprosy had been adopted. Among the causes active in aiding its spread, were the low moral standard of the natives; their habits of using the same beds and clothing, and of smoking the same pipe; bad sanitary surroundings; and the fact that the leper was never an outcast, but always treated as a member of the family.

In 1852-'53, an epidemic of small pox occurred in the islands, and over five thousand died. Vaccination of the people, resorted

to during this epidemic, and subsequent to it, is said to have aided in the dissemination of leprosy. Vaccination was made, frequently without care, from arm to arm with humanized virus. It was done by missionaries, planters, and often by the natives themselves, owing to the limited number of physicians available. Non-humanized virus has been used in the island since 1888, and this now precludes the possibility of transmission of leprosy by vaccination.

Kissing and nose rubbing, which is the native form of salutation; co-habitation; and the reception of the secretion of lepers through abrasions of the skin, are also said to be causes of communication. The natives eat *poi*, or *pai'ai*, as well as other kinds of food, with their fingers, from the same dish. Worse than this, they make the native drink, called "awa," by masticating ti or ki leaves, and depositing the pulp in an earthen jar, where it is allowed to ferment; after which, they drink it as an intoxicating beverage. The opinion generally prevails among physicians and the more intelligent classes of people on the island, that leprosy is very frequently communicated by sexual intercourse. There is no reason why this should not be the case, as we know that abrasions of the mucous membrane are among the earlier manifestations of the disease.

The mosquito, house fly, and other insects have been accused of being carriers of the disease; but, until the life, history, and habits of the leper bacilli are more carefully studied and understood, it would be wise not to express a definite opinion on this point. Dr. Alvarez, the leprologist for the Hawaiian Government, has made some interesting studies and observations of the bacilli along this line, and is said to have discovered the leper bacillus in a specimen obtained from the crushed body of a mosquito, which had previously feasted on leper ulcers.

In 1884 Dr. Arning, who was employed by the Government, also made some interesting studies and observations of the bacilli of lepers. It is believed by some, that the bacilli may exist in the soil, clothing, or on the surface of various articles for a long period of time. The celebrated experiment made by Dr. Arning on the direct inoculation of leprosy will bear repeating here. By consent of the Government, Dr. Arning, on September 30, 1884, excised a leper tubercle from the arm of a leper, and inoculated the left forearm of a criminal named Kenan, whose

death sentence had been commuted to imprisonment for life. Kenan was confined and kept under observation for four weeks following, and after that, every week for several months. After this he was examined every month, revealing the presence of the *bacilli leprae* in large numbers, until the middle of March, 1885. The bacilli then diminished in number, but remained for fourteen months after inoculation. Pains which had existed in the arm and wrist inoculated, in 1885, four or five months after inoculation, soon disappeared. There was no marked change in the patient until March, 1887, two and a half years after the introduction of the bacilli into his arm. Dr. Brody, the prison physician, then noticed changes in the right ear, and coppery looking spots on the right cheek. In 1887, Kenan was examined by Dr. Moritz, and his description given as follows: General health, good; no pain; a slight unhealthy wound on the palmar aspect of the left index finger, is the only abrasion of the skin. Covering the arms, chest, abdomen, and back is a coppery colored eruption, raised above the surrounding skin, and giving to the touch a distinct feeling of thickness. The sizes of the spots vary from that of a ten cent piece to that of a half dollar, and present shapes round, oval, and serpiginous. The back of the legs and thighs are affected, and on the thighs and knees are serpiginous patches and small plaques. The right cheek, forehead, and ear are infiltrated with leprous deposits. The eyes show no sign of diminution. The ulnar, and external popliteal nerves are thickened." Kenan was afterward removed to Molokai, and died there. This experiment was accepted as a proof of the inoculability of leprosy, but since that time, it has been stated that there were lepers in Kenan's family. His mother-in-law died of leprosy in 1891, and his own son, Josepha, was at the leper settlement, where he died in 1893. His nephew also died of leprosy at the settlement, in the same year. (Extract from *Board of Health Reports*, Hawaii.)

The period of incubation of leprosy is generally accepted to be between two and four years. Dr. Alvarez states that he has seen many cases in which the disease began to appear in four years after the exposure. The same observer says that after many experiments, he has demonstrated the existence of leprous bacilli, which were discolored after being washed in a twenty-five per cent solution of sulphuric acid, or a thirty per cent solu-

tion of nitric acid. He states that he never found the discolored bacilli in the old tubercles of ulcerating surfaces. They are probably only young or active bacilli, while the bacilli that hold the stain are old or inert. He states that this may serve to explain the failure to produce cultures in artificial media. If the tube is inoculated from old tubercles, failure results, as the bacilli are dead or have lost their power of reproduction. He also states that he obtained a growth of bacilli resembling leprosy, in a blood serum. A mongoose, inoculated with these bacilli, died in a few days without showing the cause of death.

No race of people appear to be immune from the attacks of leprosy, but some people show a decided lack of susceptibility to the disease, a characteristic attending many other even more severely contagious diseases. It seems to be indicated, that leprosy confers upon those who come in contact with it for generations, a certain immunity not enjoyed by the people of a new country which it invades; that is to say, that the virulence seems to be diminished by successive inoculations, and, when contracted, does not prove so rapidly fatal. A famous case which was used to illustrate the fact that not all persons are susceptible to the disease, is reported in Dr. Morrow's work on the subject as follows:

"A washer-woman at the capitol at Kalawao, had washed the clothing of lepers for seventeen years. She had lepers living in her house, and her two husbands were lepers before they died. Yet, in spite of this, she was hale, hearty, and plump, and as fine a specimen of womanhood as could be found on the island." Unfortunately for the theory that one can continue to possess an immunity from the disease when continually in contact with it, this woman was sent to the hospital in 1898, and died within six months, showing that she must have suffered for many years before. The native Hawaiians seem more susceptible to the disease than any other race in the islands, as the table furnished will show.

Up to the year 1874, when the leper bacillus was discovered, the theory that leprosy could be inherited was generally credited. But in the light of our present age of bacteriology, the acceptance of leprosy as a parasitic disease, makes the theory of hereditary transmission an impossibility. There may, however, be a constitutional weakness, which would predispose to the attacks of the disease.

The increase of lepers in the Sandwich Islands is entirely disproportionate to the number of births. Sterility is the usual result of marriage between lepers. Where conception takes place, abortion, still-birth, or sickly, delicate children who soon die, is the result. This is more to be noticed when both parents are lepers. In 1886, Dr. Moritz collected statistics of twenty-six children born in the leper settlement at Molokai; nine of these became lepers, while seventeen of them did not contract the disease. The successful operation of the Kapiolani Home for non-leprous children shows that, if children are moved at an early age, they do not contract the disease. The leprosy commission reported in 1892, as the result of its investigation of the facts of the hereditary transmission of leprosy in India, that "the percentage of leprous children as a result of leper marriage is too small to warrant a belief of the hereditary transmission of the disease; and further, that a specific, hereditary predisposition to leprosy is but slight, and practically does not exist." Leprosy shows itself after birth rarely before the third or fifth year, a period corresponding to that of incubation of the acquired disease. In the majority of cases it does not develop until the thirtieth or fortieth year.

The prevailing types of the disease are tubercular, the anæsthetic, and a mixed type. The tubercular is now prevalent and exceeds the anæsthetic by three or four to one. (See illustration). The statement made by Dr. Morrow, in his valuable work on the subject, that the anæsthetic was then, (in 1893), much greater than the tubercular form, is not true to-day, as will readily be seen by the census of the lepers at Molokai.

The tubercular form is characterized by the tubercles on the face, infiltrations of the cheek, nose, forehead, and lobes of the ears. The eyebrows are lost and there is a thickening of the fingers and toes, a swelling of the feet, hands and limbs, and patches resembling psoriasis are found on the chest, back, and nates. The first manifestation of this form is an eruption of round or irregular-shaped spots, the coloration depending upon the race of the individual. The spots are of various sizes, slightly elevated and somewhat sensitive to the touch, the surface of the skin being slightly thickened and swollen. These blotches readily appear and disappear a number of times, before the tubercular changes occur. Some of them remain, becoming the seats

of tubercular infiltrations, and enlarging, form pinkish or yellowish brown nodules. The development of tubercles is always preceded by a fever. The infiltrations occur on all parts of the body and hands; these parts, in the more advanced cases, becoming enormously enlarged and uneven with infiltrations. The alae of the nose thicken and broaden; the ears become protuberant, nodulous, flabby, and pendulous; and the eyebrows and eyelashes fall out, rendering the subject hideous in the extreme. The tubercles may remain stationary for months and years, and gradually undergo reabsorption; but the disappearance of one lot of tubercles, is followed by a new lot, in the same or other regions. These may remain indefinitely and harden without ulceration, or they may soften and ulcerate, secreting a yellowish brown, viscid fluid which forms into thick crusts. Ulcerations are sometimes extensive, causing loss of tissue, suppurative adenitis, and swelling of the lymphatics.

The anæsthetic form, like the tubercular, manifests itself in the same way as in other parts of the world, with no special characteristics ascribable to the lepers of the island. It is so different from the tubercular, that one can hardly believe it to be due to the same cause. In many ways, it resembles multiple neuritis, existing in disordered nutrition and sensation. The onset of the disease is distinguished by the absence of febrile symptoms and the more pronounced character of the subjective sensations of the hyperæsthesia and pruritus. The earliest signs are usually manifested in the form of very erythematous spots, and in burning or stinging sensations. In the more advanced stages, where the fibres are destroyed, there is a loss of all sensory functions. This loss of sensation allows no feeling from injuries of any kind, and often the mutilation seen in lepers is due to this fact. The most frequent sites of the spots are on the legs, but they are often found on the back of the arms, shoulders, and elbows. Many years may intervene, possibly eighteen or twenty, according to Danielson, before other disorders of any kind occur in the lepers to aid in the diagnosis, and verify the presence of the disease. Loss of sensibility about the palate, uvula, and pharynx, not resulting in complete paralysis, is one of the earliest manifestations in the mucous membrane. Neuralgic pains, with a sensation of numbness usually occur at night. The facial, ulnar, and peroneal nerves are usually the ones most

affected; while paralysis of the muscular tissues supplied by these nerves causes tenderness and retraction with the resulting deformities, which are features of nerve leprosy, the most characteristic of these deformities being the so-called leper claw. Muscular atrophy is accompanied by fibrillary contractions ending in the abolition of the electric excitability. (Charcot). The little finger is usually the first affected. A characteristic lesion is the so-called plantar ulcer, which occurs in those who habitually go barefooted. Owing to the atrophy of the glandular system, the skin dries up, wrinkles, and cracks, producing fissures, which may be the seat of perforating ulceration. The bones of the fingers may be lost, without ulceration, by a process of osseous absorption affecting one phalanx after another, or the phalanges may become the seat of gangrene. When the loss of the fingers is incomplete, the stumps have a curious position and stand out in the most distorted fashion. The finger nails show a great power of resistance, and are often the only remaining part of the fingers which have not been absorbed, even appearing on the end of the metacarpal bones. This form of leprosy is very slow and insidious in its development and course.

The mixed form is the most severe of all. In this, the symptoms peculiar to both the other types may be present from the first. It is safe to say, that one-third of the cases now at Molokai are of this type. One can readily understand, where such constitutional derangements exist, how lepers must suffer from all kinds of diseases, especially those affecting the skin, so that, at the time of death, or for months prior thereto, the leper becomes a revolting mass of ulcerating, gangrenous tissue.

In the Sandwich Islands leprosy is regarded as an incurable disease, and I believe this to be the opinion of the most careful observers. How one can say, after but two and one-half years of treatment, they consider a case of leprosy cured, I can not well understand. I am convinced that if Dr. Fox, who made the statement in a paper read before the State Medical Society in 1900, were to visit the island of Molokai, and see the cases in which, without treatment, no manifestation of the disease had been present for eight or ten years, and other cases, in which the disease had been latent for the same length of time, suddenly develop lesions which soon terminate fatally, he would be convinced that Chaulmoogra oil is not the specific he claims it to be.

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Figure 6



Figure 7

We will agree with him, however, that surroundings and change of scene have much to do in restricting the progress of the disease. The depressing influence of segregation is to a great extent overestimated, and its prejudicial effects may be observed chiefly in those cases occurring among the more intelligent classes.

Among the native Hawaiians there is no special dread of leprosy, and many cases are on record where the natives have purposely contracted the disease in order to join their friends, or live the lazy, indolent life that the lepers enjoy on the island of Molokai. A large number show a marked power of resistance to the disease. This is undoubtedly due to the fact that many are fine specimens of physical manhood, not unlike the Anglo-Saxon or perhaps the American Indian in this respect. Climatic conditions, one might say, are in some cases injurious, but in general, beneficial. The out door life, freedom from care, and the simple habits of living are conducive to longevity and constitutional resistance; while the hot, dry atmosphere, which is usually filled with floating particles of lava dust, is especially bad for the leper on the island.

The people of Hawaii have been unusually liberal in the employment of every measure and drug which has been suggested as a cure for leprosy. In 1886, Dr. Edward Arning was induced to go to Hawaii as a specialist for the Government. He accomplished a great deal in the line of investigation, but little in the line of curative treatment. In 1889 he was succeeded by Dr. A. Lutz of San Paule, Brazil, a pupil of Dr. Unna of Hamburg. Many remedies have been used such as Chaulmoogra oil; Gurgin oil, a remedy of high repute in India; salol, arsenic, strychnia, and creosote. Mercury in any form is considered harmful to lepers. Dr. Swift, in his report to the Board of Health, says, "No scientific treatment of leprosy can be carried out at the settlement, for not one-tenth of the people will continue the treatment for six months." In Japan, creosote is extensively used hypodermatically, and I was informed by Dr. Swartz, who for many years was a medical missionary, that the disease was held in abeyance, but never cured by it. Baths of various kinds, and local applications of ichthicol, chrysarobin, and salicylic acid have been very beneficially used in the healing of ulcerating surfaces. The Goto-Lotion, a solution of carbolic acid, is also very extensively used for the treatment of suppurative ulceration. In a

recent letter from Dr. E. A. Carmichael, U. S., M. H. S., to whom I am indebted for much of my information, he has recommended to the Board of Health, *Jatropha Gossyhyiflia*, a drug which has been extensively used in South America. No action has yet been taken and the drug, up to the present time, has not been tried. Dr. Carmichael makes the following statement, to prevent leprosy from being introduced into the United States:

“The period of incubation in leprosy is so long and variable—from three to seven or ten years—its detection in the early stages so difficult; and the fact that leprous patches may appear on the unexposed parts of the body, such as the upper part of the arms, chest, back, and nates; and that leprous ulcers may be present in the upper part of the nasal passages make its detection by ordinary quarantine methods uncertain. In pronounced cases, detection is easy, but these rarely emigrate, and the greatest difficulty would be met with in the slightest cases occurring in the white or mixed races. The native Hawaiian rarely emigrates, and those who leave their homes go as sailors; although I have been informed that there is a small colony of Hawaiians in Salt Lake City, Utah, who were induced to go there by the Mormon missionaries. Inquiry as to the presence or absence of leprosy among them would be interesting. It is possible for persons with leprosy undeveloped, and for slighter cases, to pass from one country to another without detection; and from the fact of its presence in various parts of the United States it is evident that quarantine restrictions do not exclude it. Few medical men are familiar with leprosy in its early stages, and cases are often diagnosed as other skin diseases; and the fact that skin diseases such as psoriasis, various forms of tænia, cloasma, scabies, erythema, etc., are often associated with leprosy, makes its detection still more difficult. Restrictive measures should be adopted to control the departure of all emigrants from the endemic foci of leprosy at the point of departure, and these should consist of careful inquiry into the family and sanitary history of each emigrant, a rigid physical examination, and disinfection of his effects. Similar procedure at the point of arrival should be adopted, and a record of the destination of the emigrant should be preserved. Adoption of the above-named measures would restrict the importation of the disease so far as it is possible to do so, but such proceedings would be still farther aided by the Government of the United States

assuming control of measures for the suppression of leprosy in the possessions recently acquired by annexation and conquest, viz., the Hawaiian and Philippine Islands, and the island of Cuba, in all of which leprosy exists to a greater or less extent. In so doing, the United States would assume its share among the nations in stamping out this pest of ages, and would set an example which might, to the undoubted benefit of mankind, be emulated by the enlightened countries of the world."

BIBLIOGRAPHY.

Surgeon E. A. CARMICHAEL, U. S. M. H. S. "*Report of Leprosy in the Hawaiian Islands, November 29, 1898.*"

Hawaiian Board of Health Reports. 1864 to 1893.

Leprosy Commission Report of India. 1892.

Dr. PRINCE A. MORROW'S Article on Leprosy. 1894. (*System of Dermatology*, etc.)

LEGENDS FOR PLATES.

FIG. 1. NUINUI, MALE.

A common type of tubercular leprosy. The patient shows exaggeration of the normal furrows of his forehead, with some discrete tubercles in his hypertrophied *alde nasi*. His hands show the results of burns and scalds explained in the case of Apolo.

FIG. 2. APOLO.

A young man, who like many Hawaiians, does not know his age, shows a well-advanced tubercular form of leprosy, with ulcers at the wrist and elbow, and the bends of the fingers. Most all have ulcers on their fingers from injuries, and often from burns. Owing to the complete thermic anæsthesia, they do not feel the effects of fire, or hot kitchen utensils, and consequently get badly burned or scalded, before they happen to see that their hands are touching the fire, or something hot. The duration of life in the tubercular form is about ten years, while anæsthetic cases live about fifteen years. This patient, being far advanced, will probably not live more than a year.

FIG. 3. KEOLAHOU, WOMAN, AET. 39 YEARS.

Had an eruption on the right side of her face resembling erysipelas, with paralysis of facial nerve. Paralysis of the lower lid keeps the eye dry exposed to dust, and causes ulceration and blindness. The erysipelatoid eruption has healed in this case, but the eye-ball will slough, producing an ugly sore.

FIG. 4. KELII, BOY, AET. 6 YEARS.

Paralysis and infiltration of the right side of face, producing deformity, ulceration of nasal bones and necessary mouth breathing.

FIG. 5. HOMELONI, WOMAN, AET. 34 YEARS

Shows infiltration of tubercular leprosy on both cheeks, the right cheek shows a very large mole, covered with gray hair and infiltrated with leprosy. It is worthy of notice that leprosy never occurs on the scalp, except perhaps on the edges where the hair is thin, nevertheless it seems in this case, to have selected by preference the hairy mole.

FIGS. 6 AND 7. PILIPO, BOY, AET. ABOUT 10 YEARS.

Shows a common appearance of the eruption of leprosy in large round patches, like *tinea circinata*. The eruption in this case is whiter than the normal skin.

Editorial

The Pathology of Herpes Zoster

Henry Head's work in sensory localization of visceral disease, including some of the epochal contributions to medical literature, is extended and fortified by a clinical and pathological study by himself and A. W. Campbell, which is printed in the last issue of *Brain*. (Autumn, 1900, Vol. XXIII, No. 91.)

In this is established a pathological basis for the symptoms previously described. This work deals with herpes zoster from two standpoints: first, the determination of the pathological lesion underlying the disease; and, secondly, the determination of the cutaneous distribution of certain fibres that enter the posterior root ganglion. If the patient has died with the eruption still out upon his skin the affected ganglion will be found to be in a condition of profound inflammation. If not severe, the inflammation may pass away and leave no recognisable change in the ganglion, but the greater the severity of the eruption, and the profounder the scarring it leaves behind it, the more certainly will permanent changes be found in the posterior root ganglion. The changes consist of (1) extremely acute inflammation with the exudation of small round deeply-staining cells, (2) extravasation of blood, (3) destruction of ganglion cells and fibres, and (4) inflammation of the sheath of the ganglion. In the posterior root changes take place corresponding to the lesion of the ganglion and consisting of acute degeneration followed by a greater or less degree of secondary sclerosis. This lesion is also found in fibres of the peripheral nerves, and can be traced back to the fine twigs which pass into the skin to supply the area over which the herpetic eruption is distributed. In two of the author's cases haemorrhage and inflammation occurred not only in the ganglion, but in the peripheral nerve in connection with it. The lesions of the ganglion are also attended by acute degeneration of the root fibres in the posterior columns of the spinal cord, which probably appears about the ninth or tenth day after the eruption. When the degeneration is cleared away from the spinal cord it leaves no perceptible sclerosis behind it. When the area of eruption extends on the arm,

the degenerated fibres can be followed from the root zone to the postero-external column, and by this path up to the nucleus of this column. When the eruption lies on the leg, the field of degeneration passes into the postero-internal column, and one half of the field finally lies against the posterior median septum. In zoster of the trigeminus lesions exist in the Gasserian ganglion, and secondarily, in the trigeminal root. Zoster may similarly take place in disease of the ganglia from implication in some local inflammatory process, and an herpetic eruption follows undistinguishable from that arising as a manifestation of the acute specific disease. Malignant disease of the spine, and spinal injuries may thus be accompanied by zoster. Locomotor ataxia, multiple sclerosis, general paralysis, acute lobar pneumonia and dysentery may also be complicated by this eruption, due either to an endarteritis obliterans involving the ganglionic vessels or to a toxine exerting its influence upon the ganglia.

The authors discuss herpes zoster as an acute specific disease of the nervous system, and trace the analogies between this disease and acute anterior poliomyelitis. Pathologically the lesions are similar; and, in addition, the posterior root ganglion is the exact equivalent of the anterior horn. For, whereas, on the motor side the cells of the neurons of the lowest level lie in the anterior horn, on the afferent side, they happen to lie collected together outside the spinal cord in the posterior root ganglion. Thus zoster might justly be spoken of as acute posterior poliomyelitis.

Scientific Review

THE BACTERIOLOGY AND PATHOLOGY OF INFLUENZA

Like a number of other infectious diseases influenza was suspected to be due to some minute parasite long before its true cause was discovered. No real opportunity to study the disease by the methods of modern bacteriology occurred until the great epidemic of 1889-90. At this time numerous investigators studied both simple influenza and its complicating pneumonia, but without success. With our present knowledge we can assume that this failure was probably due

to two reasons, one being the fact that the influenza bacillus stained with difficulty, the other that it did not grow on our ordinary culture media.

Whilst the influenza bacillus was doubtless first seen by Kirchner, he failed to properly interpret his observations, and to Pfeiffer belongs the credit of first discovering and accurately describing the causal relationship between the bacillus and the disease. This he did in his classical work on the cause of influenza, published early in 1892.

The organism was first seen and isolated from the sputum of influenza cases. It is one of the smallest of the known pathogens, and appears as a very small slender bacillus from two to three times as long as it is broad, and showing certain staining peculiarities. These consist in a resistance to staining fluids, so that preparations must be exposed to the dye for a considerable length of time in order to obtain satisfactory results. The organism will stain with any of the aniline dyes, but weak carbol-fuchsin solution, as originally proposed by Pfeiffer seems to be the most satisfactory. When stained the bacilli often show polar staining, a fact which has doubtless led at times to their being mistaken for diplococci. Occasionally atypical forms of the organism have been observed. Thus Lartigau and Grassberger describe long thread like forms in old cultures. The organism is readily decolorized by Gram's method, is non-motile, and does not form spores. Of great importance from a prophylactic standpoint is the question of the resistance of the organism to chemical and physical agencies. It would seem that it cannot live outside the human body for any great length of time. According to Pfeiffer the organisms die in from thirty-six to forty hours in dried sputum, and cannot multiply in water. This observer concludes from this that the disease can only be spread to a very slight extent, if at all, by sputum dust. It seems almost certain that the spread really occurs by direct contact with infected individuals. The observations of Seitz, who studied the spread of the disease in thinly populated mountain districts, seem to definitely prove that personal contact is necessary. Flügge suggests that the actual method of infection is through the inhalation of the minute, moist particles of nasal and bronchial secre-

tion, which are diffused into the air surrounding an influenza patient as a result of coughing. He has shown that such particles may remain suspended in the air for hours.

As would be expected of an organism without resistant forms the influenza bacillus is easily destroyed by heat and chemical agencies. A temperature of 60 degrees Centigrade kills it in five minutes. A solution of one to one thousand bichloride kills it in ten minutes, and a solution of one to one hundred carbolic acid kills it in half an hour.

The optimum medium for the growth of the influenza bacillus is one containing hemaglobin or some of its derivatives. Pfeiffer used agar smeared with a few drops of sterile blood taken from the finger tip. Filipowski used agar to which oxyhemaglobin or hematin were added. Huber used agar plus hematogen. Not only hemaglobin, however, but also semen, cholesterin, and serum albumen favor the growth of the influenza bacillus (Cantani). Borchardt has grown it on agar streaked with sterile sputum or sterile bile. Nasstjnkoff claims to have used media containing yolk of egg with success, but Capaldi states that this is a poor medium. The blood of several of the lower animals, but particularly that of the pigeon, can be used successfully.

The organism grows best in the presence of oxygen, though according to Kamen it will grow in an atmosphere of hydrogen. It grows best at body temperature and rarely grows at a temperature below 28 degrees Centigrade, though Lartigau has grown it at a temperature below this by gradually cultivating it at diminishing temperatures.

Grassberger states that the influenza bacillus grows better either with staphylococcus aureus or on a medium on which this organism has been previously cultivated than it does alone. Meunier and Lartigau have both confirmed this observation, the former author describing the process as "cultural satellitism."

The colonies of the influenza bacillus on media are quite characteristic. Pfeiffer describes them as minute and glass-like, and often seen best by the aid of a hand lens. They grow as a rule as discrete colonies and do not tend to coalesce. Animals, with the exception of monkeys, are not susceptible to the disease, though they may be killed after

the introduction of cultures by the toxins which are introduced with the bacteria. Although the toxin has never been isolated in purity on account of the cultural peculiarities of the organism, no doubt can exist as to its presence and its power. Certain ptomaines isolated from the urine of influenza patients by Griffiths and Ladell and later by Hood, indicate the production of metabolic changes by some powerful toxic agent.

Immunity to influenza, if produced, is certainly of very short duration, if we judge by the clinical aspects of the disease. The extensive animal experiments of Delius and Kolle were also to all intents and purposes negative as far as bringing forward definite evidence of immunity was concerned.

The influenza bacillus is found chiefly in the expectoration, especially in the tough, yellowish-green pus discharged in cases of influenza bronchitis. It is found in this pus both within and outside of the pus cells—the intracellular distribution occurring particularly in the later stages of the disease. It is also found in the nasal discharge in some cases in enormous numbers, and may be found in the discharges from other mucous surfaces communicating with the air passages as the accessory nasal cavities and the middle ear. The morning sputum is especially to be recommended for examination according to Pfeiffer. The organism is not as a rule found outside of the respiratory tract. The reports of Canon, Letzerich, Cornil and Chantemesse, Hirschfeldt, Klein and Bruschetini, all of whom claimed to find the organism in the blood in a greater or less percentage of cases, are all open to criticism. The descriptions of practically all of these writers show that they were not dealing with the bacillus of Pfeiffer, but with other organisms more or less remotely resembling it. Since Pfeiffer's original article was published the great majority of writers agree with him in stating that the disease is essentially a toxic one. Thus Weichselbaum, Huber, Voges, Mossé, Pfuhl, Borchardt and other careful observers all failed to isolate the organism from the circulation after numerous attempts. That the organism can occasionally occur outside of the respiratory system and its annexes is shown by its isolation from meningeal exudates by Pfuhl,

Haedke, Cornil and Durante and others, and its occasional isolation from the spleen.

An excellent description of the pathological changes in the ordinary form of influenza is given by Ribbert. The changes in brief consist of a rather superficial inflammation of the mucous membrane of the trachea, larynx and bronchi. The microscopic examination of the affected parts shows an infiltration of the mucosa with polynuclear leucocytes, with marked dilatation of the blood vessels. There is some desquamation of the epithelial covering, and the superficial layers of the submucosa are usually involved in the process. The influenza bacilli are present between the epithelial cells, and also in the submucosa.

It is not the purpose of this paper to go deeply into the pathology of all the complications of influenza, as this will be taken up by others. The pulmonary complications, however, are of such frequency and importance, that a brief description of their pathology will not be out of place. Excellent papers dealing with this phase of the disease have been written by Finkler, Labes, Gutmann, Wasserman, Leichtenstern and others.

The complicating pneumonia occurs in from 6 per cent. to 34 per cent. of all cases, the percentage given varying according to different authors, the mortality from the complication reaching as high as thirty per cent. Wasserman points out that true lobar pneumonia must be distinguished from influenza pneumonia, which is essentially of the lobular type. As Leichtenstern has noted there is an unusual number of cases of true lobar pneumonia during an influenza epidemic. The grippe pneumonia is usually preceded by a bronchitis, though it may be primary. Finkler recognizes an acute and a chronic form, the latter being intermittent, with periods during which the influenza bacilli almost disappear from the sputum only to return again.

There is nothing absolutely characteristic about the appearance of the lung in the ordinary grippe pneumonia, though there seems to be an unusual tendency to the occurrence of abscess formation, gangrene, and chronic interstitial processes.

The lesions are most common in the lower lobes and take the form of scattered areas of consolidation which are not granular. They may, however, attack the upper lobes, or take

the form of a wandering pneumonia. As Finkler puts it the condition is one of splenization rather than hepatization. In these consolidated areas are dilated bronchi filled with pus, and it is in this pus that the influenza bacilli are most abundant. Microscopically the exudate is cellular rather than fibrinous as a rule. A purulent pleurisy accompanies the pneumonia in twenty per cent. of the cases according to Litten. Bacteriological studies show that true lobar pneumonia following or during influenza is generally due as usual to the *diplococcus lanceolatus*, though the influenza bacillus may accompany it.

The typical grippe pneumonia is sometimes a pure infection with the influenza bacillus, sometimes a mixed infection, and sometimes a secondary infection due to organisms other than the influenza bacillus.

Of sixteen cases examined by Chiari two showed a pure culture of the influenza bacillus, one a mixed culture, and the remaining thirteen were due to the *diplococcus lanceolatus*. Other observers record a much larger percentage of cases due to the influenza bacillus alone.

The consideration of the subject would be incomplete without a reference to the latency of the influenza bacillus. Clinically it is a well known fact that tuberculosis individuals are especially susceptible to influenza pneumonias. Finkler and others have pointed out that influenza bacilli may be found in the sputum of tuberculous individuals as long as eight months after an attack of influenza. Others have confirmed this observation. The observations of Kretz are not without interest in this connection. This observer examined the expectoration of 950 cases during the summer season when no influenza epidemic existed. In forty-seven cases he was able to find the influenza bacillus, though only twelve of these presented symptoms suggesting the disease. Kretz, Baumler and others remark on these facts, and suggest that such latent cases are apt to give rise to local secondary outbreaks of the disease. Lindenthal thinks that the bacilli may also remain latent in the accessory nasal sinuses and thus give rise to secondary attacks. There are many other points regarding the pathology of this interesting disease which might be taken up, its effects on pregnancy and menstruation, and upon malignant growths, for example. GEORGE BLUMER.

State Medicine

Edited by Harry Seymour Pearse, M. D.

PROPOSED CRUSADE AGAINST ILLEGAL PRACTITIONERS

The following circular letter has been sent to each member of the Medical Society of the County of New York, by the Board of Censors of that Society:

NEW YORK, December 15th, 1900.

DEAR DOCTOR:

The medical laws of the State of New York provide that, before one can practice medicine, a certificate of proficiency shall be obtained from the Regents of the University of the State, which is given only after a satisfactory examination. The purpose of this law is to protect the people from incompetent practitioners of medicine, and, in so far as the medical profession is concerned, this purpose is accomplished.

There are, however, many irregular practitioners who practise in open defiance of this law, apparently without molestation. This is unfair to the medical profession, an incentive to irregular methods, and can only be to the disadvantage of the community at large.

It is the purpose of the Medical Society of the County of New York to begin an active crusade against these unlicensed, and therefore illegal, practitioners, and we ask the co-operation of the profession and the public generally.

Any information concerning unlicensed practitioners will be gratefully received by the Board of Censors and the Counsel of the Society, and will be considered confidential when requested.

Communications can be addressed to the members of the Board of Censors or to the Counsel.

The task of preventing the illegal practice of medicine is one of the most difficult which any medical society has to contend with. It presents a problem which nearly every society has coped with at one time or another, and almost invariably without success. To prosecute an illegal practitioner means a prolonged legal fight involving considerable expenditure of money and time and the Censors or Special Committees of various societies have had these difficulties facing them, or lacked the necessary decision and aggressiveness to bring these offenders to account.

On the whole, I do not think that the societies can be justly censured for these failures. Few have the necessary funds at their command to employ an attorney and it is

naturally distasteful for one physician to make himself conspicuous by obtaining evidence against another, nomatter how much of an imposter he may be. It is foreign to his sphere of action and thought. Notwithstanding this, societies have many times presented evidence to the district attorney, but always with such discouraging results that it now hardly seems worth while to bother.

A local society can prosecute an illegal practitioner through its attorney, otherwise it can only place the evidence before the District Attorney. If he refuses to give the case proper attention, charges can be preferred against him before the Governor. But what society has the resources for such an action?

The Medical Society of the County of New York has our earnest wishes for its success in this fight. It has chosen what seems to us the best and only method—the employment of counsel to cooperate with a Board of Censors made up of excellent men.

IMPORTANT MEDICAL BILLS IN THE NEW YORK LEGISLATURE

Assembly Bill No. 2. Introduced by Mr. Fancher. An Act

“To amend the agricultural law relative to diseases of domestic animals, to repeal article 4 of the public health law and incorporate in its stead certain provisions of the agricultural law relating to the public health, and making an appropriation to carry out the provisions of this act.”

This bill is far-reaching in its effect and if enacted would produce radical changes in the work of the State Board of Health and Department of Agriculture. It is based upon recommendations of the Governor, made in his first annual message and the recommendations of a special committee of the Assembly appointed to “Investigate Tuberculosis and Other Diseases of Animals,” made in its report to the Legislature February 1, 1900.

Since 1895 the Tuberculosis Committee of the State Board of Health has, with insufficient appropriations and under great difficulties, carried on a rigid work of eliminating tuberculosis from the cattle of the state, and instituted a system of education by which the farmer is made to appreciate the value of clean stables and yards and of having cattle free from disease. While

the law permits the constant inflow of tubercular cattle to the state this committee has done excellent work by constantly destroying infected herds.

In a word—this measure takes tuberculosis and glanders in animals out of the hands of the Health Board and places them under the control of the Department of Agriculture. It appoints one appraiser for the state and appropriates \$10,000 for the compensation of owners of cattle slaughtered for tuberculosis.

It seems to us that it would be a mistake to divide the forces fighting against tuberculosis, and that the Health Board should be given full power and sufficient monies to carry out all measures connected with the prevention of the infection of human beings by bovine tuberculosis.

Assembly Bill No. 160. Introduced by Mr. Cotton. Senate Bill No. 97. Introduced by Mr. Audett. An Act "To exempt from taxation the property of certain medical societies situated in cities of the first class."

Relieves from future taxation or payment of unpaid taxes all real or personal property situated within any city of the first class belonging to the medical society of any county, which county is wholly or partly within such city. The exemption is limited to \$150,000 in Kings or New York, and \$50,000 in any other county affected. This bill was presented last year and died in committee.

Assembly Bill No. 167. Introduced by Mr. Bell. -An Act "To amend section 152 of chapter 661 of the laws of 1893, entitled 'An Act in relation to the public health, constituting chapter 25 of the general laws.'"

The text which amends the existing law will best serve as an explanation of this measure. Any person shall be regarded as practicing medicine within the meaning of this act who shall prescribe, direct, recommend, or advise, for the use of any other person, any remedy or agent whatsoever, whether with or without the use of any medicine, drug, instrument or other appliance, for the treatment, relief, or cure, of any wound, fracture, or bodily injury, infirmity, physical or mental, or other defect or disease. This article shall not be construed as prohibiting the service of any person in an emergency, or the domestic administration of domestic remedies; nor shall it be construed as pro-

hibiting any manufacturer of artificial eyes, limbs or orthopedic instruments or trusses in fitting such instruments on persons in need thereof when such artificial eyes, limbs or orthopedic instruments or trusses are prescribed by lawfully qualified physicians.

Assembly Bill No. 168. Introduced by Mr. O'Brien. An Act "To amend sections 7, 8 and 17 and chapter 416 of the laws of 1890, entitled 'An act to establish a state hospital in some suitable location in the Adirondacks for the treatment of incipient pulmonary tuberculosis, and making an appropriation therefor.'"

Under the provisions of the law of 1900, the board of trustees created by that law, after examining proposed sites for the hospital, at Dannemora and Lake Clear, and conferring with the State Board of Health and the Forest Preserve Board, finally voted in favor of a site at Ray Brook, near the Lake Clear site. This bill rescinds the action of the board of trustees, and said trustees are directed to select a site for the establishment of said state hospital upon lands belonging to the state in the town of Dannemora, Clinton county, or upon land in said town donated to the state for the purpose. It also directs the superintendent of state prisons to proceed with the construction and equipment of the hospital by the use of convict labor as far as possible.

Assembly Bill No. 169. Introduced by Mr. Allds. Senate Bill No. 114. Introduced by Mr. Brackett. An Act "To amend the state charities law, relating to the State Board of Charities."

Again in this bill the recommendations of the Governor are carried out. The present Board of Charities, made up of twelve members, is done away with and a new board of three members created, one of which shall be president and shall devote his entire time to the performance of his official duties. The other two members shall be appointed from the commissioners of the land office. The president shall receive an annual salary of \$2,500, the other two members, their expenses.

Assembly Bill No. 219. Introduced by Mr. O'Brien. An Act "Making an appropriation for further construction of Dannemora State Hospital for Insane Convicts."

The construction of this institution is hastened as much as possible by yearly appropriations. It was occupied in the Fall of 1900. The present appropriation amounts to \$89,500.

Assembly Bill No. 266. Introduced by Mr. Fitzgerald. An Act
"To amend chapter 661 of laws of 1893, entitled 'An act in
relation to public health,' constituting chapter 25 of the
general laws in relation to the practice of massage, mechano-
therapy, hydro-therapy and electro-therapy."

This bill provides for the licensing of all persons, not qualified
physicians, who desire to practice the stated therapeutic measures,
by the local health officer of cities; their qualifications to be
passed upon by him. Also for registration in the county clerk's
office, of certificate of qualification issued by the health officer.

Senate Bill No. 146. Introduced by Mr. Grady. An Act
"Relative to Hospitals."

The first section of this bill will explain its action: "No hospi-
tal incorporated under the laws of the state, sustained in whole
or in part by charitable contributions or endowments, shall be
liable for the neglect, carelessness, want of skill, or for the
malicious acts of any of its officers, agents or employees, in the
management of, or in the care or treatment of, any of the patients
or inmates of such hospital."

The recent difficulties at Bellevue Hospital, New York, form
the incentive of this measure.

In Memoriam

PETER F. CURLEY, M. D.

From the *Boston Medical and Surgical Journal* we learn of
the death of Dr. Curley, which occurred December 13th last, at
his home in Newport, R. I., after an illness of some two
months. Dr. Curley was born in Newport in 1861, received
his degree from the Albany Medical College in 1883,
practiced two years in Albany, two in Providence and since
1887 had been in Newport. He was a member of the State
Board of Health, State Board of Medical Examiners, and of
the local and State Associations and of the American Medical
Association.

Medical News

Edited by H. Judson Lipes, M.D.

MEDICAL SOCIETY OF THE COUNTY OF ALBANY.—A regular meeting of the society was held January 16th, 1901, in Alumni Hall. The meeting was called to order at 8:55 P. M., the President, Dr. William Hailes, in the chair. The following members were present: Doctors Blumer, Capron, Curtis, Dawes, George, W. H., Hinman, Lanahan, Le Brun, MacFarlane, Moore, C. H., Mosher, Neuman, Pearse, Richardson, Shaw, Traver, Trego, Van Auken, Vander Veer, A., Van Rensselaer, Wansboro, Ward, Washburne, Wiltse.

1. Reading of the minutes of the last meeting. Dr. WARD moved that the minutes be adopted as printed in the ANNALS. The motion was seconded and carried.

2. There were no minutes of special meetings.
3. No new names were proposed for membership.
4. No reports or resolutions were presented.
5. No special communications were presented.
6. Reading of papers.

The President announced that Dr. Ward would present a paper on "The Intestinal Form of Influenza."

Dr. WARD apologised for not reading a formal paper, and stated he felt sure the members would understand why the time had been too limited during the past three weeks for the preparation of such a paper.

The following is an abstract of Dr. Ward's paper: The poison of grippe expends itself on some part of the nervous system, and the part to be attacked cannot be told beforehand. Taste and touch are generally affected, smell is notoriously interfered with, and hearing occasionally. The optic nerve is most rarely affected, although cases of unilateral loss of vision have been seen. Special nerves are often affected, as severe facial neuralgia, at times quite pronounced, but almost any nerve may be involved. Various forms of neurosis may occur, such as insanity, and suicide. The mental depression is often very severe. The various forms of depression of the nervous system may exist for a very long time. There may be dyspnœa from involvement of the respiratory nerves, and in some cases memory fails.

Referring to the contagiousness of the disease, Dr. Ward stated that it was undoubtedly contagious, as it often traveled from one member to another of the same household. Different forms of the disease were often seen in different members. In connection with the question of air conveyance the speaker recalled a conversation with Lieutenant Peary, the Arctic explorer. Peary stated that when they had been in winter quarters for six weeks an epidemic of influenza broke out, although they were 180 miles from the nearest habitation. This was not due to the unpacking of infected clothing, as this had been done when they first went into winter quarters. They found out afterwards that there had been an epidemic of influenza in the nearest settlement a short time before their outbreak. The gastro-intestinal form of influenza has the same cause as the ordinary

form, that is to say, Pfeiffer's bacillus; it has a period of incubation of from two to six days.

Dr. Ward stated that he did not know of any predisposing causes, and that the previous condition of health seemed to have little to do with it. The pathological condition found in the gastro-intestinal form, consisted in a catarrhal inflammation of the stomach and intestines. The cæcum is the part most seriously involved. Jurgensen mentioned a severe ulceration of the stomach and intestines in one case with œdema and inflammation of the submucous and muscular coats. Weichselbaum reports cases with severe inflammation like phlegmonous gastritis accompanied by hemorrhage. Most cases show no marked changes.

In the symptoms of the gastro-intestinal form, the tongue varies in appearance. In Dr. Ward's experience there is nothing typical about its appearance. It is sometimes glazed and red, like the tongue in glossitis, in other cases it has a thick, yellowish fur, like the tongue in acute indigestion. He has seen once or twice a thin brown coating, making the tongue look as though stained by tobacco juice. The breath is particularly fetid in many instances; a bad taste in the mouth is often complained of, and loss of the sense of taste is very common. Hemorrhage from the gum, tongue and pharynx may occur. Anorexia is almost universal, which is a most fortunate provision of nature, as the patient cannot digest anything. Dr. Ward stated that he thought it better in these cases not to insist upon the patient taking food at first. Weight is almost always lost, from twenty-five to forty pounds having been noted in some cases. The loss of appetite may last far into convalescence. There has been serious stomatitis at times. Abdominal tenderness is present in a good many cases, the characteristic fact about it being that it changes from point to point, and varies from day to day in intensity. Hemorrhage from the stomach may occur, and may amount to several ounces of blood.

Tonsillitis occurs not infrequently, congestion and redness of the throat, with pain being quite common. There may be a burning sensation extending down the œsophagus to the cardiac orifice of the stomach, with difficulty in swallowing. This is due to a neuralgic condition of the œsophagus.

Enteritis and peritonitis are occasional complications, and are always serious. Diarrhœa is much more common than constipation, although the latter may be so serious as to suggest intestinal obstruction. The speaker mentioned one case of this sort where peritonitis occurred with death. Constipation and diarrhœa may alternate. The discharges are generally thin, at times becoming choleraic, with cramps, and even convulsions, followed by coma, such cases ultimately recovering. The constipation is accompanied by paresis of the muscular coats of the intestines, with vomiting, diarrhœa and collapse.

Teissier and Leichtenstern report severe cases of constipation with death. They also relate cases of inflammation of the cæcum, without appendicitis, which were confirmed by autopsy.

Another form of gastro-intestinal gripe is the so-called typhoid form, the cases appearing something like typhoid fever. The tongue is typhoid,

and there is sordes on the lips and teeth. The disease, however, starts in suddenly, with a chill and rapid rise in temperature, and can usually be distinguished from typhoid by this beginning. The absence of the Widal reaction would aid in making a diagnosis.

The changes in the liver in grippe consist in hyperæmia, cloudy swelling, and in some instances thromboses. Jaundice is present in some cases, and varies in different epidemics. One observer records an epidemic where slight jaundice was always present, so that he thought it a pathognomonic sign.

A few cases of acute yellow atrophy following grippe have been reported. The spleen varies in appearance. It may be markedly enlarged, there may be no change in size, or it may be contracted. The prognosis in the gastro-intestinal form is not as good as in the other forms, nor yet is the form very fatal. The average mortality is two per cent.

The President suggested that if Dr. Ward agreed, the two papers could be discussed together.

Dr. VAN RENSSELAER then read his paper on "The Pulmonary Form of Influenza."

The President declared the papers open for discussion.

Dr. VAN RENSSELAER referred to the epidemic in Peary's camp, of which Dr. Ward had spoken, and suggested that it was more probably due to a latency of the influenza bacillus in one of the party than to air conveyance.

Dr. WILTSE remarked that it was fortunate that both papers were read at this time. He had seen both forms during the present epidemic. Most of the cases of the intestinal form were observed early in the epidemic, while the ones lately affected were respiratory in form. In the gastro-intestinal form a pronounced nausea and vomiting were most severe and very difficult to control. He had not found any remedy which controlled them successfully. He was impressed, in connection with the cases exhibiting the respiratory form, with the fact that the infection might be very local in character. He had seen a number of cases recently where the infection was limited to the larynx.

Dr. WARD stated that Dr. Van Rensselaer's paper had interested him very much, especially the description of the physical signs in grippe pneumonia. In the cases of grippe pneumonia he had seen the expectoration had not been so profuse as in true lobular pneumonia, but the character of it was often very similar, the sputum being rusty and tenacious. He could confirm what Dr. Wiltse had noticed regarding laryngitis. He had seen more cases in this epidemic than in all the others put together. One case which he had seen recently, had been so severe that it seemed almost necessary to perform a tracheotomy.

A motion to adjourn was made and seconded.

GEORGE BLUMER, *Secretary*.

WILLIAM HAILES, *President*.

ALBANY MEDICAL COLLEGE ALUMNI ASSOCIATION OF THE CITY OF NEW YORK. — The sixth annual banquet of the Association was held at the "Arena" on the evening of Friday, January 18, 1901. Among those present were Drs.

Edwin Barnes ('65), T. D. Crothers ('65), Charles Gartner ('95), John H. Dorn ('64), John A. Cutter ('86), William F. Holcombe ('49), W. C. Spalding ('81), Thomas H. Willard ('87), William Geoghan ('74), A. Parker Muir ('96), A. E. Cordes ('99), M. J. Lewi ('77), F. B. Stellwagen ('95), F. W. Loughran ('90), R. F. Macfarlane ('88), J. C. White ('66), E. F. Quinlan ('68), Albert S. Newcomb ('66), Erving Holley ('96), C. de W. Van Dyck ('79), J. H. Cotter ('94), George H. Baker ('86), Bernard Livingston ('99), George F. Morris ('78), Allen Fitch ('79), M. L. Rhein ('80), Robert S. Fivey ('87), Louis N. Lanehart ('83), Charles H. Richardson ('87), representing the Faculty, and others. After the banquet, the evening was devoted to speeches by members of the Association, and the anniversary was thus spent in an air of reminiscence and anecdote. The speakers were Drs. Richardson, Crothers, Holcombe, Quinlan, Newcomb, Geoghan, Lewi, Spalding, Cutter, Willard, Macfarlane, Loughran, Muir, Livingston and Rhein. A unique feature of the meeting was the presenting of an engrossed letter by Dr. J. A. Cutter, to the memory of the late Dr. H. T. Hanks, which was signed by all the graduates present.

The by-laws were amended so that the election of officers will be held at the annual banquet hereafter. The following named office bearers were elected for the ensuing year: president, Dr. Allen Fitch; vice-president, Dr. Thomas H. Willard; secretary, Dr. Warren C. Spalding; assistant secretary, Dr. Charles Gartner; treasurer, Dr. William Geoghan; governors for two years, Drs. C. de W. Van Dyck and Geo. H. Baker.

UNION UNIVERSITY ALUMNI ASSOCIATION OF NORTHEASTERN NEW YORK.—At the first annual banquet of this Association, held January 12, 1901, at the Hotel Ten Eyck, Albany, the following resolution was adopted:

"*Resolved*, That articles 1 and 3 of the Constitution of the Union College Alumni Association of Northeastern New York, be and the same are hereby amended to read as follows:

"Article I.—Name.—The name of this association shall be The Union University Alumni Association of Northeastern New York.

"Article III.—Membership.—Any person who is, or has at any time been, a president or member of the board of trustees, or of the board of governors, or member of the faculty of Union university or any department thereof; any person who has received, or been entitled to receive, the diploma of Union university or any department thereof; any person who shall have been a student at any department of the university in any course for the period of at least one collegiate or university year, and shall have left in good standing; resident in the territory above named shall be eligible to become a resident member of this association. Any person similarly qualified, resident without the territory above named, shall be eligible to become a non-resident member of this association."

Before the banqueters were seated, prayer was offered by Rev. Dr. Wells. The first toast was a standing one to the "Union of the Stars and Stripes." The toastmaster, President Edward P. White, ('79), presented President Raymond, who responded to the toast "The Union of Faith and Finance." General Amasa J. Parker, president of the law department,

spoke of "The Union of the Various Departments of the University." The college was represented by Dr. James R. Truax, ('76), who made an eloquent address upon "The Union of Letters and Life." Hon. James W. Eaton, of the Law School faculty, spoke on "The Union of Law and Politics." "The Union of Medicine and Music" was the theme assigned Dr. Arthur G. Root, of the Medical College Faculty. The other speakers and toasts in their order were: "The Union of Earth and Sky," Chas. L. Pruyn, of Albany; "The Union of the Pharmacist and Physician," Alfred B. Huested, M. D., Ph. G., president of the School of Pharmacy; "The Union of Athletics and Achievement," Wm. G. Brown, ('95), of New York; "Union with the Eternal Feminine," the Rev. Sheldon M. Griswold, ('82), of Hudson. Judge Grenville M. Ingalsbee, ('68), of Sandy Hill, was elected president for the following year; Frank Burton, ('83), Gloversville, vice-president; James N. Vander Veer ('99), Albany, was re-elected Secretary and Treasurer.

ALBANY HOSPITAL FOR INCURABLES.—A tract of land on Allen street, near Madison avenue, was purchased recently by the trustees of the Albany Hospital for Incurables, upon which will be erected a modern and commodious building. The modern pavilion system connected by corridors will be utilized. The work has been incorporated under the direction of Messrs. M. T. Hun, L. G. Hun, Wheeler B. Melius, Daniel Casey, with the approval of Judge William L. Learned. The incorporators are William H. Murray, M. D., Robert Geer, John W. McNamara, John H. Farrell and Charles N. Phelps. The managing trustees are the original incorporators, with but one exception, the substitution of Rev. J. W. Spensley, D. D., as secretary.

ALBANY GUILD FOR THE CARE OF THE SICK POOR, STATISTICS FOR DECEMBER.—Number of new cases 38; of these 1 was a dispensary case receiving home care, 18 were district cases, and 19 were moderate income patients.

Classification: Medical 21, surgical 17. This general classification includes 3 cases of scarlet fever, 1 of skin disease, 10 gynecological and 6 obstetrical (3 in the regular work of the guild, and 3 in the special obstetrical department). Number of visits with nursing treatment 549; for professional supervision of convalescents 217; total for month 766. Cases were reported to the guild by 4 of the health physicians, and by 14 other physicians.

Special Obstetrical Department. Summary: Number of patients in December, 3; 1 reported by Dr. Goewey and 1 by Dr. Guyer, Health Physicians, and 1 by the senior nurse of the guild. Obstetrician, Dr. H. Judson Lipes. Number of calls, 16; students in attendance, 3; number of calls, 9; nurses in charge, 3; number of visits, 31. Two cases normal. The other cases was of interest, because of accessory breast situated over right scapula. Phlegmasia alba dolens in right leg. Instruction cards have been prepared for cases referred to this department. These are given to patients when they make application for preliminary examination. The directions are given in English, German and Italian.

NEW YORK STATE BOARD OF HEALTH — BULLETINS FOR OCTOBER AND NOVEMBER.— *Typhoid fever; its Distribution and Etiology* is considered in the *October bulletin*. The average yearly mortality for the period from 1890-9, from typhoid fever in the State, has been 1,655, no year varying 300 either way from this. Distribution through the year was: in January, 126 deaths; February, 112; March, 92; April, 92; May, 78; June, 75; July, 96; August, 160; September, 240; October, 226; November, 186; December, 150. In estimating the number of deaths and death-rate for the nine preceding years, from typhoid fever in twenty cities of 20,000 and over population, they were divided into cities of low, moderate, excessive and very high prevalence. In the first class are given New York (including only Manhattan, Bronx and Brooklyn), Yonkers, Kingston, Utica, Auburn and Rochester. In the second division are found: Oswego, Buffalo, Syracuse, Newburg. The cities having an excessive prevalence are Poughkeepsie, Amsterdam, Binghamton, Troy and Elmira; while a very high prevalence prevailed in Watertown, Niagara Falls, Albany, Cohoes and Schenectady.

In the *November bulletin* Dr. Curtis discusses *small-pox and vaccination*. "During the last three years we have had considerable experience with it, commencing with an importation, in 1898, by a traveling theatrical troupe, among whose members the disease existed undiscovered until twenty localities in the western part of the State had been visited with public parades and performances, and as a result small-pox was distributed in fourteen counties, not less than 320 persons took the disease, and a year passed before it ceased to exist. During this current year small-pox has been brought to seventeen places from outside, from near or remote western and southern states by direct importation to the single locality, instead of by peripatetic individuals, and having been in every case recognized promptly, has not been permitted to spread; in thirteen places, only the single imported case occurred, in two there were three or four cases, and in one there were fifteen cases, all among negro brick-yard laborers, who brought it from the south, and to whom it was limited without spreading to the general community.

Now towards the close of November, prior to which time the State has been free for three months from this disease, a repetition of the experience of 1898 on a smaller scale is threatened, in the appearance of another traveling troupe of colored minstrels from the South, in whose personnel small-pox has been discovered, after having exhibited at eight places in the eastern part of the State, in three of which, Albany, Schenectady and Gloversville, an outbreak has followed, three cases in Albany and several in the other two places and their vicinity. There has also been a considerable outbreak in a locality of New York city which this troupe touched in passing, though the health authorities trace the origin instead to a more remote unrecognized case. The disease has near the end of December branched from these places of original implantation, and appeared in two others—at Big Flats, in Chemung county, where it was probably taken direct from New York, and at Glens Falls, which is apparently indebted to Schenectady for its outbreak.

AMERICAN MEDICO-PSYCHOLOGICAL ASSOCIATION.—The next annual meeting of the American Medico-Psychological Association will be held in Milwaukee, Wis., June 11, 12, 13 and 14, 1901.

ST. PETER'S HOSPITAL TRAINING SCHOOL FOR NURSES.—A training school for nurses was instituted at St. Peter's Hospital January 4th. The first lecture in the proposed two-year course was delivered by Dr. J. V. Hennessey, his subject being "Physiology." Among the lecturers are Drs. Hun, Van Rensselaer, Macfarlane, Morrow, Hailes, Theisen, Harvey, Blumer, Ward, Van Allen, Munson and Reilly.

THE NEW YORK SCHOOL OF CLINICAL MEDICINE has opened a new department of neurology, namely, the study of the neuroses and psychoses of spirit and drug diseases. Dr. T. D. Crothers, of Hartford, Conn., has been elected professor, and will deliver lectures and give clinical instruction on inebriety from alcohol, opium, cocain, and other narcotics, particularly on the symptomatology, treatment, and medico-legal relations. These lectures will begin February 18, 1901, in the lecture room of the College, 328 West Forty-second street, New York City. This is the first effort to give special systematic instruction on these diseases, and indicates a great want in the profession of scientific knowledge in this field.

A TEXT-BOOK OF SPECIAL SURGERY—BY DR. FRANZ KÖENIG.—Herbert S. Stone & Co., of Chicago, have recently announced that they have in preparation, and will shortly issue, an important Text-Book of Special Surgery, by Dr. Franz Koenig, translated from the seventh German edition by Drs. Arthur B. Hosmer and Christian Finger. It is the authorized translation, and will consist of three large octavo volumes containing fully nine hundred illustrations.

THE NORTH-WESTERN LANCET.—The January number of the *North-Western Lancet*, published at Minneapolis, Minn., appeared in a "new dress and with a new editor." The improved typographical appearance is pleasing, and the publishers are happy in their selection of Dr. W. A. Jones, as the editor.

THE ANNALS OF GYNECOLOGY AND PEDIATRY.—With the November number, The Annals Publishing Company come into life as the owner of the *Annals of Gynecology and Pediatrics*. New in name only, the former owners still retain their interests, and although some new blood has been infused at the business end, together with an increased capital, the editorial staff will remain as before.

THE NEW YORK STATE JOURNAL OF MEDICINE.—In January last was issued the first number of the New York State Journal of Medicine, the official organ of the New York State Medical Association. This monthly publication is to take the place of its annual volume of *Transactions*. It is edited by the committee on publication with Dr. James Hawley Burtenshaw, of New York, as chairman. The editorial pages precede the department of *Original Articles*, and include the notes of the Association, reports of county and district meetings, and various topics of interest to the members of this society. Among the original articles is one by Dr. H. C. Gordinier, of Troy, on "Trichinosis; Report of Two Cases." Beginning with page seventeen is the "Charter of the New York State Medical Association," and its "By-Laws," as adopted in October, 1900.

PERSONAL.—DR. WILLIS G. MACDONALD has been appointed a member of the Board of Trustees of the new State Hospital for the Treatment of Incipient Tuberculosis.

DR. WILLARD N. BELL, of Ogdensburg, has been appointed to the State Board of Homœopathic Medical Examiners, in the place of Dr. Laird, resigned.

DR. JOSEPH ALAN O'NEILL (A. M. C. '97), is now stationed at Dao, Island of Panay, Philippine Islands. In a recent letter published in *The Concordiensis*, January 17, he gives an excellent idea of the hardships and trials of an inland hospital surgeon, without a hospital.

Book Reviews

International Clinics. A Quarterly of Clinical Lectures and Especially Prepared Articles on Medicine, Neurology, Surgery, Therapeutics, Obstetrics, Paediatrics, Pathology, Dermatology, Diseases of the Eye, Ear, Nose, and Throat, and Other Topics of Interest to Students and Practitioners. By Leading Members of the Medical Profession throughout the World. Edited by HENRY W. CATTELL, A. M., M. D., Philadelphia, U. S. A., with the collaboration of John B. Murphy, M. D., of Chicago; Alexander D. Blackader, M. D., of Montreal; H. C. Wood, M. D., of Philadelphia; T. M. Rotch, M. D., of Boston; E. Landolt, M. D., of Paris; Thomas G. Morton, M. D., and Charles H. Reed, M. D., of Philadelphia, with Regular Correspondents in Montreal, London, Paris, Leipsic, and Vienna. Volume III. Tenth Series, 1900. Philadelphia: J. B. Lippincott Company. 1900.

There are twenty-seven articles in this volume, of which the first seven constitute a symposium on Genito-Urinary Diseases. In the first paper of this series Dr. Ferdinand C. Valentine describes a method of sterilizing the male urethra which, though elaborate, can be successfully done in ten minutes. Dr. L. Duncan Bulkley contributes an article on Extragenital Chancres, which contains valuable statistics. Dr. Bransford Lewis describes a ureter-cystoscope for use in males, for which he claims advantages over others. No fluid is needed to inflate the bladder, as a Mignon lamp is used, there are no lenses to get out of order and the instrument can be sterilized by heat. In Dr. Fernand Lagrange's article on Respiratory Gymnastics for Tubercular Patients he shows how an increased amount of oxygen may be absorbed by the practice of Swedish movements for the respiratory muscles without necessitating general muscular exercise. Dr. A. B. Marfan's statistics on his treatment of typhoid fever in childhood would be more valuable if the total number of cases were given, and if the death rate of those treated by quinine and by cold baths were given separately. In a contribution to the Pathology and Treatment of Epilepsy, Dr. Rubenstein briefly reviews the different theories as to the pathology of the disease, and states that it is a neurosis due to increased irritability

from lack of energy (spasmophile condition of the brain). His theory is well worked out, and it is to be hoped that it will lead to the improvement in therapeutics that he anticipates. Dr. A. Boissard divides cases of uncontrollable vomiting of pregnancy into two classes, one due to hysteria and the other to auto-intoxication. The clinical pictures are entirely different, but both varieties may result in death.

The last article, by Thompson S. Westcott, M. D., is a monograph of sixty-four pages on The Scientific Modification of Milk. This monograph is divided into four parts, Introductory, The Calculation of Percentage Formulæ, General Consideration of Substitute Feeding, and The Practical Application of Percentage Feeding. The part dealing with percentage formulæ requires considerable mathematical work on the part of the reader. The other parts are interesting, and show the value of the methods, but it is desirable that the calculations should be simplified if the method is to come into general use.

R. G. C.

A Treatise on Diseases of the Nose and Throat. By ERNEST L. SHURLY, M. D., Vice-President and Professor of Laryngology and Clinical Medicine, Detroit College of Medicine; Laryngologist and Late Chief of Staff, Harper Hospital; Consulting Laryngologist and Chief of Laryngological Clinic of St. Mary's Hospital; Consulting Laryngologist to the Woman's Hospital and Foundlings' Home; Member of the American Laryngological Association, of the American Medical Association, of the Michigan State Medical Society, etc. Illustrated. New York: D. Appleton and Company, 1900.

At the present time, when almost every throat specialist of prominence has written a book on his specialty, there is of course bound to be a certain amount of repetition. The author, who has had an extensive clinical experience, has written a book which compares favorably with any of the recent works on the nose and throat. He has avoided all unnecessary detail, and that is one reason why the treatise is also of value to the general practitioner. Every essential point, however, particularly in the consideration of the treatment of the different conditions, has been thoroughly considered, and the literature well covered. The book comprises 774 pages, with colored plates and 223 illustrations in the text. It also contains a complete formulary and an excellent chapter on local treatment, which adds much to its value. The colored plates, largely after Grünwald, are very good, and mention should also be made of the illustrations demonstrating the correct and incorrect method of intubation of the larynx. Dr. Shurly's book is as a whole so good, that it is hard to find anything about which there might be a difference of opinion. There are, however, a few points that are open to criticism. In considering the treatment of tuberculosis of the larynx, the author advocates scarification of the larynx in the chronic forms of the disease to relieve tension, even before the stage of ulceration. He also states that ulceration is inevitable, particularly where there is much infiltration, and that the scarification

modifies the subsequent necrosis of the tissues. It would seem that the criticism that has been raised against this method of treatment, viz., that it opens up the deeper tissues to the danger of further infection, is certainly just. Then too it is not at all absolutely certain that ulceration is inevitable in every case of laryngeal tuberculosis, even after infiltration, and scarification in such cases, before the ulceration has started, might be a risky procedure. In speaking of the use of general anæsthetics for the removal of adenoids, the author recommends chloroform and the A. C. E. mixture, but particularly chloroform. It would be difficult to find two more dangerous anæsthetics for use in operations on children belonging to this lymphatic diathesis. Hinkel has recently reported a death from the use of chloroform in an adenoid operation, and has collected statistics, (nineteen deaths from chloroform since 1892 during operations for adenoids), which prove conclusively that chloroform is a most dangerous anæsthetic for this particular class of cases. The author recommends injections of alcohol in certain cases of laryngeal fibromata, but does not mention the use of alcohol in the treatment of papillomata of the larynx. The chapter devoted to neuroses of the upper air passages is particularly good, as is the article on fibrinous rhinitis. He rightly condemns the use of the electric cautery during acute attacks of hay fever.

C. F. T.

Refraction and How to Refract. By JAMES THORINGTON, A. M., M. D., Professor of Diseases of the Eye in the Philadelphia Polyclinic. Second Edition. Three Hundred Pages. Two Hundred Illustrations, Thirteen of which are Colored. P. Blakiston's Son & Co., Philadelphia, 1900.

We congratulate the author upon the remarkable success of his work. The fact that within nine months the entire first edition was exhausted and a second edition called for should be very gratifying to him.

At the time of its publication, there was a demand for a compact book of practical instruction for the student of refraction based on the advanced work of American scientists, and that the writer has fully met the demand, is not an exaggeration.

Within three months after its publication there was a call for it in England where the superiority of American methods of refraction are recognized. There is a still greater demand for this, the second edition.

The ANNALS for *January, 1900*, contained a lengthy and critical review of the first edition. The second, following so closely upon the first, is but little different. There are some corrections of a few typographical errors and two or three paragraphs have been rewritten in an improved and clearer style. There are no additions. The intrinsic merit of the book is its recommendation and its success is well deserved.

H. S. P.

Studies in the Psychology of Sex. The Evolution of Modesty.—The Phenomena of Sexual Periodicity.—Auto-Erotism. By HAVELOCK ELLIS. 6 $\frac{3}{8}$ x8 $\frac{7}{8}$ inches. Pages xii-275. Extra Cloth, \$2.00, net. Sold only to Physicians and Lawyers. F. A. Davis Company, Publishers, 1914-16 Cherry Street, Philadelphia.

In these three studies, each complete in itself, the author endeavors to

make clear certain facts, a fuller knowledge of which is essential "to the analysis of the sexual instinct which must form the chief part of an investigation into the psychology of sex."

Those who are interested in this subject will find here gathered together, in each of the studies, much valuable information concerning the habits and customs of different tribes, peoples, or individuals, as the case may be. Upon the facts and observations thus collected, from a wide range of authors, ancient and modern, are based the various conclusions advanced by the author. Some of the conclusions are in advance of those more commonly received, and others are along lines which have as yet been but little touched upon, but nevertheless most of them seem to be well substantiated by the facts adduced.

In any event, the numerous facts cited, and their full discussion, cannot but be helpful in promoting a better understanding of some of the problems of sexual psychology.

LYMAN ASA JONES.

Current Medical Literature

MEDICINE

Edited by Samuel B. Ward, M. D.

Cardiac Murmurs Originating from Adhesions. (Des souffles cardiaques d'origine adhérentielle.)

PAUL DUPONCHEL. *Gazette des hopitaux civils et militaires*, 73rd year, No. 104.

Duponchel reports two cases which came to autopsy, in which there was present, during life, a cardiac murmur, pretty sharply localized to the region of the apex in the one case, and in the other at the third intercostal space on the left side. In both of these cases nothing was found to account for the murmur, except adhesions between the pleura and the pericardium on the left side. In one case there was also an obliteration of the pericardial sac. Being somewhat struck by these results, Duponchel next investigated the cardiac condition of thirty-three soldiers, who had had pleurisy. In twenty-eight of these the pleurisy had been on the left side, and in twenty-six of the twenty-eight a cardiac murmur was present. The author made a further examination of 747 young soldiers, regardless of their previous history, and found cardiac murmurs present in thirty-nine. In fifteen of these thirty-nine there was a history of a preceding left-side pleurisy.

Duponchel then gives a description of the character of the adhesive murmur. He states that it has the character of a functional murmur in the sense that it is variable in force, in intensity, and even in its existence, according to the position of the patient. Its most frequent situation was in the second or third intercostal space, that is, corresponding to the region of the pulmonary artery. It is generally systolic and soft in character. Its mechanism was explained by the author as a narrowing of the pulmonary artery from the indirect tension of the adhesions pulling upon the pericardium.

A Case of Acute Albuminuria (Acute Renal Congestion) with Uræmia, Recovery.

F. C. EVILL.

With Two Similar Cases and Comments.

SAMUEL WEST. *The Lancet*, October, 6, 1900.

Dr. Evill's patient was a strong man, of good antecedents, who presented a history of hard office work, and an attack of epidemic influenza, three weeks before the attack of uræmia. The uræmic symptoms developed suddenly in the night, and were characteristic, and accompanied by diminution of the quantity of urine with albumen and blood. Active eliminative treatment was adopted, but the symptoms became critical, unconsciousness ensuing, followed by a convulsion. Venesection was resorted to, and the diaphoretics, with dry cupping, vapor baths and pilocarpin were continued. The treatment was then reinforced by the administration of oxygen, which was followed by relief of the dyspnoea and the patient passed into a comfortable sleep. The patient continued to improve, and in about three weeks recovered.

Dr. West reports two similar cases, one recovering, and the other terminating fatally. In his comments on the three cases he calls attention to a preceding attack of epidemic influenza in two, and to the great relief obtained by the administration of oxygen. The prognosis in all seemed desperate, yet when recovery once began, it was rapid and permanent. The group of cases most resembling these is that in which acute albuminuria develops in the course of specific fevers—for instance, in scarlet fever. Cases of such severity following specific fevers are almost invariably fatal.

A Case of Gonorrhæal Endocarditis. (Ein Fall von Endocarditis Gonorrhœica.)

LUDWIG STEIN. *Wiener klinische Wochenschrift*, 47, 1900.

The fact that specific heart affections may be attributed to gonorrhœa is a discovery of the last decade, although as long ago as 1854, Brandes pointed out the relation between the specific disease and articular rheumatism, complicated by endocarditis. Traube, in 1862, reported a case of gonorrhœal endocarditis, and Leyden also, somewhat later, but no special pathology was revealed, until 1893, when Leyden discovered the gonococcus in a case of ulcerative endocarditis, thus establishing the occurrence of the cardiac affection independently of the joint lesions. The author reports the case of a man of twenty-two, who was received in hospital on the 4th of December, with a gonorrhœa of five weeks' standing and a swollen penis, due to periurethral abscess. Under treatment, the local symptoms were relieved, but the patient continued in pyrexia, and staphylococci were found in the blood. A typhoid state developed, and the patient died on the 12th of December. The autopsy revealed purulent bronchitis, pulmonary infarcts, purulent exudate within the left pleura, multiple pleural and pericardial hæmorrhages, flaccid and

degenerated heart, with a pronounced exudate and enlargement of the mitral valves, parenchymatous degeneration of the liver and of the kidneys, which were also studded with infarcts, and purulent prostatitis and cystitis.

The author did not identify the gonococcus in the affected mitral valves, because this organism could not have been expected to survive a temperature of over 39 degrees C., to which the patient had been subjected. There could have been little doubt, however, as to the cause of the cardiac lesion, not only from the history, but from the fact that at the time of the preliminary examination of the patient, there was no indication of cardiac involvement. The etiology of this complication has been declared by Weichselbaum to be a mixed infection, due to invasion of the valves by the staphylococcus aureus, this organism finding a favorable focus upon tissues prepared for it by the previous infection with the gonococcus.

OBSTETRICS AND GYNÆCOLOGY

Edited by James P. Boyd, M. D.

The Treatment of Fibroids in the Non-Pregnant Uterus.

E. F. FISH. *The American Journal of Obstetrics*, November, 1900.

The author reaches the following conclusions in regard to the treatment of fibroids in the non-pregnant uterus. *Myomectomy* is the operation of choice: (1) when the tumor is pedunculated; (2) when it is single, whether subserous, interstitial, or sub-mucous, and can be enucleated without loss of uterine tissue, and the tumor cavity can be closed and covered with peritoneum; (3) when the desire for an heir outweighs all other considerations. *Hysterectomy* is indicated: (1) when the tumor involves so much of the uterus that a cavity too large to be properly closed and covered with peritoneum would follow its removal; (2) when several tumors exist, especially little nodules; (3) when the adnexa are diseased to such an extent that they must be sacrificed; (4) when the disease ceases to be local; (5) when hæmorrhage, pressure, or great pain is a persistent symptom; (6) whenever malignancy is suspected, or the tumor is of rapid growth; (7) after the change of life. *Palliative* treatment is indicated: (1) when the patient is very much reduced from loss of blood, as a prelude to radical cure; (2) when the existence of chronic nephritis, diabetes, tuberculosis, or other constitutional disease forbids radical cure; (3) when the patient is past forty years of age the tumor small, the main annoyance hæmorrhage, and she is desirous of awaiting the effects of the menopause.

A Case of Phlegmasia Alba Dolens during Pregnancy. (Cas de phlegmasia alba dolens pendant la grossesse.)

A. BRINDEAU. *L'Obstétrique*, September, 1900.

A case of phlegmasia alba dolens is reported by the author, which made its appearance during the eighth month. The patient was thirty-three years of age, and in the third pregnancy. The two previous pregnancies terminated normally, there having been no phlebitis. At the beginning

of the eighth month cephalalgia appeared, then dizziness on arising in the morning. Gradually these troubles increased, vomiting and constipation were added, and then the left lower extremity became painful. Swelling soon became prominent. There was a general œdema particularly marked in the lower extremities and interior portion of abdominal wall. The skin of the limb was glistening, smooth and pale, and distended by serosity. The œdematous portion was quite hard, elastic, and did not pit easily on pressure. By palpation, a painful cord along the track of the femoral vein was easily felt. The right leg presented a slight œdema, and very large varices. The abdomen appeared as usual at full term. Hydramnios was present. Examination of the urine revealed albumin. The temperature was normal. The other organs presented nothing in particular. Absolute rest and exclusive milk diet was insisted upon. Later, normal labor came on, the stage of expulsion lasting only about an hour, injury to the swollen member being prevented by complete flexion of the other extremity. Three weeks after labor, the swelling had almost entirely disappeared, and at the end of five months albuminuria had completely disappeared.

Such observations are exceedingly rare during pregnancy. One might ask if auto-infection caused the phlegmasia. It is much more probable that this woman had had, sometime during the seventh month of her pregnancy, an infection which had passed unnoticed (influenza, gastrointestinal infection), and that this light malady had provoked at the time the production of a nephritis and a phlegmasia. We know that it is not necessary for microbes to penetrate into the blood in order to provoke venous thrombosis, and that the experiment of Jakowski goes to prove that their toxins of themselves are able to determine this complication. Certainly pregnancy of itself will not produce phlegmasia and this complication during pregnancy is always due to an intercurrent cause.

Uterine Leucorrhea. (Blennorrhagia Uterina).

FAVIER. *Gazet. degli ospedal. e delle cliniche*, July 3, 1900.

An acute form occurs in children accompanied by vulvitis. The lesion is found in the mucosa of the cervix only. These cases recover under simple antiseptic treatment of the vulva and vagina. Other cases are complicated with an endometritis. These cases show all the symptoms of this trouble, especially an abundant discharge. These cases are the most intractable and unless quickly cured become chronic. The chronic form is by far the most frequent one. It is sometimes primary, sometimes secondary to the acute form. The influence of pregnancy and parturition is almost always bad, because of the cervical tears which favor fresh inoculation. In the chronic form the lesions are always more deeply seated, the uterus is enlarged, frequently misplaced, the cervix thick, engorged and eroded, and allows the discharge of a yellowish or greenish and very thick muco-pus. Pain is not very acute, there is a feeling of weight in the pelvis, menstruation is irregular and an abundant leucorrhea is present. Because of the inability to cure these cases by ordinary methods, it is suggested to have recourse to Schroder's operation.

W. H. H.

NEUROLOGY

Edited by Henry Hun, M. D.

*The Symptomatology of Paralysis Agitans. (Zur Symptomatologie der Paralysis agitans.)*D. FRANK. *Monatsschrift für Psychiatrie und Neurologie*, September, 1900.

The author has observed several cases of paralysis agitans in the clinic of Oppenheim, in which special symptoms not heretofore particularly reported were presented.

In several cases the so-called "false foot-tremor" was seen. This symptom is elicited by placing the foot in dorsal flexion, and holding it in this position for several seconds. Typical tremulous movements ensue, which differ from the ordinary foot-clonus in that they are slower, and rhythmical, and are manifested in the extensor muscles. The symptom is valuable in cases in which the tremor does not appear early, and in cases in which the differentiation between paralysis agitans and arterio-sclerosis is difficult. The writer further calls attention to the occurrence of associated movements in cases of shaking palsy. Two cases of unilateral disease are reported, in which active movements of the muscles of the affected side were accompanied by similar movements of the unaffected, although active movements of the latter were followed by no similar state in the diseased areas. In one of these cases the author notes that the unilateral half of the face corresponding with the affected half of the body was involved in the rigidity and tremor of the disease. Another case is reported in which there were marked disturbances of sensibility, including diminution of both painful and temperature senses.

The paper concludes with the outline of two cases in which the differential diagnosis between paralysis agitans and arterio-sclerosis was in doubt, and the symptoms pointed again to a strong inter-relation in the pathology of these two diseases. One patient presented the typical manifestations of paralysis agitans, and in addition, headache, vertigo, bulbar manifestations and exaggerated knee-jerk. The second case presented only a superficial resemblance to paralysis agitans, with the exception of a tremor. There was predominance of symptoms particularly suggestive of arterio-sclerosis, as paresis of the extremities, spasms, and increase of the patellar tendon reflex and true ankle-clonus, together with mental defects, dysarthria and dysphagia. Cases have been reported in which these manifestations of senile degeneration have faded away, and have been followed by manifestations difficult to distinguish from those of paralysis agitans. Such a variety of symptoms, which point unmistakably to involvement of the cerebral hemispheres, bears strong evidence of an association of this disease with vascular degenerations.

*Traumatic Diseases of the Brain. (Ueber Erkrankung des Gehirns nach Trauma.)*M. KOPPEN, *Archiv für Psychiatrie und Nervenkrankheiten*, XXXIII, 2, 1900.

Chronic nervous diseases following accidents have been freely discussed, under the generic title of neuroses, and little has been accomplished in

exploiting the lesions accompanying them. The author reports eight cases, with pathological findings, from his service in the Charité, and deduces the following conclusions:

1. Violence inflicted upon the skull frequently results in small lesions upon the base of the frontal lobes, at the apices of the parietal lobes and upon the occipital lobes. They are also found when the skull is not injured. At the areas mentioned destruction of the tissues is shown by hæmorrhagic infiltration of the tissues and all stages of encephalitis. From these foci of destruction later appear scars and other defects with a cicatricial investment.

2. The presence of such scars may be taken as an indication of a previously sustained trauma. Foci of softening are frequently localized in the cerebral cortex, but diminutive cicatrices, with numerous areas of hæmorrhage, may be assumed to be of traumatic origin. The existence of such defects is shown by small contractions or depressions. When these scars and defects are found upon the base of the brain, the incidence of a traumatism is almost certain.

3. The exuded blood may be entirely resorbed or for a long time may remain in the form of pigment deposits or of colored amorphous masses, or small bodies which preserve the outward form of blood corpuscles. The absence of signs of a preceding hæmorrhage does not negative the occurrence of a trauma.

4. Certain symptoms stand in direct relation to the occurrence of the lesions of the base of the brain, *e. g.*, indications of the meningitis, as rigidity of the neck and forced positions of the body.

5. Severe cerebral symptoms, as coma with spasms, in which death ensues, may appear suddenly in traumatic cases, without the appearance of any other condition than the minute areas of destruction of the basal cortex. These compel the assumption that an irritation proceeds from these areas, sufficient to call forth general symptoms, probably in the form of circulatory disturbances. These severe cerebral manifestations may ensue long after the trauma.

6. The symptoms of sudden irritation of the brain and of a general mental degeneration, may also develop after injuries to the head, which have shown no immediate consequences and especially have not caused any severe disturbance of consciousness. Symptoms following immediately after the accident fail in cases in which a material change in the cerebral substance has taken place.

7. The brain may be injured by an accident, in which there has been no direct blow upon the head, but in which the impact has been upon the foot or the knee or the buttocks.

8. Dementia ensuing upon an injury to the head is not indetical with dementia paralytica, and may best be described as dementia post-traumatica. There are stages in this disease, especially when the history is not known, when confusion with dementia paralytica is highly probable.

9. Universal changes in the vessels, which have been described by Kronthal, and Friedman, as having taken place in traumatic cases, were observed

by the author in one case, but were wanting in others, in which, owing to the long time following the occurrence of the injury they might reasonably have been expected. The question arises as to whether such vascular changes are a necessary accompaniment of concussion of the brain, or merely an incident. It is further to be remembered that such universal changes may occur in arterio-sclerosis.

10. In case of extreme dementia following trauma there is often no other lesions than the cicatrices in the cerebral cortex, so that the development of a general irritation affecting the entire nutrition and blood supply of the brain must be assumed.

Neuropathic Hemorrhages from the Genito-Urinary Organs. (Hémorrhagies Névropathiques.)

M. LANCEREAUX, *Gazette des hopitaux civils et militaires*, 73rd year, No. 95.

According to Lancereaux a number of writers, particularly Malherbe and Legueu, have stated that all hematurias are symptomatic and due to a general toxic or infectious condition, or to some local condition. These writers deny the existence of an idiopathic hematuria. Lancereaux disagrees with them, and his paper is taken up with a record of his own cases and those which he has collected from the literature, which presented a hematuria without known cause, which cleared up very rapidly under treatment. In all of the cases cited the general health of the individual was unaffected by the hematuria. Most of the cases occurred in distinctly nervous individuals—sometimes the individuals attacked were hysterical. The appearance of the blood in the urine in some cases followed the suppression of bleeding from other parts, as from hemorrhoids; at other times had seemingly no connection with previous hemorrhages. In many cases the hemorrhage followed violent attacks of anger.

According to Lancereaux this neuropathic hematuria does not differ from neuropathic hemorrhages in general. It is generally preceded by pains in the lumbar region and the hypogastrium, which is due to the congestion of the kidney, which occurs before the hemorrhage. The urine from the patient generally shows an even distribution of the blood throughout. The march of the condition is essentially intermittent; sometimes periodic; the duration varies from some days to some weeks, and even months. The termination is rarely fatal, although cure may be tardy unless the proper medication is applied. According to Lancereaux the administration of quinine has been in his hands a specific. Very often the disease disappeared in five or six days.

ALBANY MEDICAL ANNALS

Original Communications

THE DUTY OF THE STATE TOWARD ITS IDIOTIC AND FEEBLE-MINDED.*

By JOHN F. FITZGERALD, M. D.,

Superintendent of the Rome State Custodial Asylum, Rome, N. Y.

Fellow-members of this Conference, Ladies and Gentlemen:

This is a fitting occasion and an especially fitting place in which to discuss the subject I have chosen as the topic of my paper, but I feel that the task is beyond my ability to do justice to it. Able writers have written upon and eloquent speakers have discussed this subject from every aspect, and I can but in a measure, reiterate what has been written and said.

Fifty years ago, on nearly this identical spot, a bill was introduced in the legislature for the purpose of establishing an asylum for idiots. In the month of July, 1851, an act was passed by that legislature establishing the New York State Asylum for Idiots. This bill was not passed without strenuous efforts and repeated failures in previous legislatures, not on account of opposition, I imagine, entirely, but because of indifference. The belief that idiots were capable of being improved was then officially recognized for the first time in this State.

How much credit is due Dr. Backus who advocated and worked for the passage of such a measure for years previous to its enactment, and to Dr. Wilbur, who labored so long, so

*Read before the New York State Conference of Charities and Corrections, November 22, 1900.

faithfully and so successfully to demonstrate that the principle was not a chimerical one! How many the changes in organized charities since those days! Instead of the New York Lunatic Asylum, we have thirteen or fourteen great State hospitals for the insane, with staffs of well-educated physicians to minister to the needs of the patients. Instead of the New York State Idiot Asylum, we have the Syracuse State Institution for Feeble-Minded Children with its large corps of teachers all working harmoniously together for improvement of the feeble-minded.

Time has furnished changes in medical nomenclature as applied to the idiotic. A distinction is now recognized between the idiotic and those higher in the plane of intelligence, and, as a result, the institution that was an asylum for idiots has become the institution for feeble-minded children. The distinction is properly made, in my estimation. The Syracuse institution was primarily an educational institution for children who were feeble-minded and fulfills the purpose of its organization though it does not bears its original title.

In process of time, other propositions looking to the bettering and improvement of the defective classes have been urged on the Legislature with a fair measure of success. In 1878, the New York State Custodial Asylum for Feeble-Minded Women was organized. It had been previously a part of the institution at Syracuse. To the New York State Custodial Asylum at Newark, was, from its inception, assigned the duty of furnishing the feeble-minded woman, during the child bearing period, protection, both from herself and from the licentious designs of members of the other sex.

In 1893, the Rome State Custodial Asylum, then known as the Oneida State Custodial Asylum, was organized for the care of unteachable idiots, and in 1894, the act creating Craig Colony for epileptics was passed by the legislature, so that much progress has been made in securing enlightened treatment and care for our defective classes. Each of these institutions has its especial field of operations in the great scheme of organized charities.

It is not the purport of my paper to tell what has been accomplished by the State in the past, but to call your atten-

tion to the necessity for further and more comprehensive action on the part of the State. The State has been bountiful in its provisions for the insane. Probably all of us remember the struggle which existed for years before the establishment of the State Care Act. The condition of the insane in the county institutions as reported by the State Board of Charities, the State Charities Aid Association and the Commissioner in Lunacy, was deplorable in the extreme and was responsible for the final passage of the State Care Act. The opposition to the act was mainly on the part of county officials, who perceived that the removal of the insane to state institutions would be a serious loss of patronage.

There are other classes of inmates in the county houses to-day that the county authorities are not clamoring to retain, and which they are anxious to be relieved of. These are the feeble-minded, the idiotic, the insane feeble-minded and idiotic, the epileptic feeble-minded and idiotic.

The report of the State Board of Charities, which contains the most recent statistics, available at this time, of these classes, informs us that on the first day of October, 1899, there were, including men, women and children, 1154 idiotic and feeble-minded people confined in the city, town and county almshouse institutions. This large number of defectives is distributed among 61 institutions in this state. These people are supported now at public expense under probably as many different managements as there are institutions.

As stated before, the county authorities are anxious to be relieved of the responsibility of their care. All of these 1154 persons have been sent to the institutions in which they are confined presumably because they were without relatives who were able or willing to support them.

Private charity accomplishes a world of good, but never, to my knowledge, has it assumed the burden of providing care for a large number of idiotic or feeble-minded. The work of caring for these afflicted ones has no attractiveness in itself, as they have, beyond question, the most repulsive types of humanity among them. Very few county and city institutions are properly equipped to care for them and little or no effort is made in such institutions to improve them or

utilize their abilities in occupation which produces any remuneration for their maintenance.

There are nearly as many reasons why they should be removed from the county and city institutions as there were for originally removing them from their homes. They become the butt of ridicule and often of blows from the pauper inmates of those institutions which are not provided with a sufficiency of trained attendants to properly look after them, and as a result, they are also taught all the vile habits of the debased paupers.

Where there have been women of the feeble-minded class confined in county houses, a number of instances have come to my notice where such women have given birth to one or more offsprings who of necessity become a public charge. We have had several instances at the Rome State Custodial Asylum where mothers and their children, all illegitimate, have become inmates. The task of caring for this large number of defectives of necessity devolves upon the State, both for economical as well as humanitarian reasons.

These classes, as I have stated before, are now cared for at public expense. If they were transferred to the care of the State, the State tax would be increased beyond what it is at present, of necessity, but the cost to the tax payer would be no greater and would ultimately become lessened by removing to responsible custody all the women of these classes, thus preventing further possibility of increase from such sources. If all who are now confined in public institutions other than state, were confined in two or three state institutions, the cost of supervision would be reduced to a minimum.

I would respectfully urge upon you the necessity of committing to state care not only those now confined in county and city institutions, but also those who are in their homes; especially if the parents are poor or in medium circumstances.

It is in such families that a large number of children are usually found, and let me impress upon you the fact, that with but few exceptions, it takes more of the time of the mother to look after one idiotic or feeble-minded child than she is able to devote to all the other children. In addition, each

idiotic child as soon as it is able to appreciate anything, becomes a source of immoral contamination to other children which is far reaching in its results.

Are we not justified in asking that such cases be confined where they cannot cause such direful effects? It would be well if these defectives could all be taken from the custody of their parents and such of them as could be improved and educated, be sent to a school for that class; the balance to be sent to a custodial asylum for life.

When the child has received the training of the educational institution and is about to leave there, he should be transferred to a custodial institution; for, ladies and gentlemen, it is rarely that such a person is capable of maintaining himself or herself in competition with normal humanity, while in the state custodial institutions, under suitable management and supervision, he or she becomes self-supporting, or at least is able to contribute something toward that support. The child who is now a burden and source of anxiety to its parents, and a menace to the community, becomes, eventually, a factor in earning its own maintenance, wholly or in part.

The condition of some of the cases which are presented for admission to the Rome State Custodial Asylum is pitiable in the extreme when we see what they are and appreciate what they might have been if properly educated and trained.

You will, perhaps, ask why this is not done now. The State maintains an educational institution for the feeble-minded youth at Syracuse, a custodial asylum for feeble-minded women at Newark, and a custodial asylum for idiots at Rome. The answer is at hand. The graduates of the Syracuse institution are returned to their homes or to the care of the county authorities, where the good results obtained at Syracuse are nullified within a short time by lack of opportunity to apply the education and training received.

Why are they not transferred to Newark and Rome as suggested? Because both of these institutions are limited in their capacity which is filled. They are, therefore, compelled to decline the reception of more cases.

How is this condition to be rectified, fellow members of

this conference? The responsibility devolves upon you and upon all citizens of the state who are alive to the dangers, both moral and economical, for longer tolerating the neglect of this important question. It is only by educating the public to a realizing sense of the situation, that we can hope to ameliorate the condition of the idiotic and feeble-minded of this state. When our legislators appreciate the economy of lessening the sources of degeneracy, then only can we look for their assistance.

None of us should cease our efforts in this campaign of education until every moral imbecile, every feeble-minded and idiotic person is provided with a home at the expense of the state. Then only can we hope to see a lessening in their number, true economy initiated.

The proposition to confine all of these classes for life in an institution may sound harsh and arbitrary. The reverse is true. What is the lot of the average imbecile or idiot at home? You can all picture his condition from your own knowledge of him. But few realize what the happiness of the same individual would be in institutional life. His physical wants are supplied; he is among his equals and those who sympathize with him in his childish troubles. He has an interest in community life. His dormant faculties are aroused by healthful employment and school exercises. During his leisure moments, he is provided with sports and entertainment within his comprehension. The satisfaction of the imbeciles with their existence in an institution has been impressed upon me during the last few years by the pleasure shown on innumerable occasions when they have returned from their homes after a short visit. The love, kindness and thoughtfulness of their parents cannot compensate them for the joy of again being with their similarly afflicted fellow beings. In fact, the institution has become their natural home to the exclusion of any other.

I trust that one of the results of this first conference of Charities and Corrections of the State of New York will be an awakening of interest in the welfare of the most helpless classes of humanity, the idiotic and feeble-minded.

THE VALUE OF ANTITOXIN IN THE PROPHYLAXIS OF DIPHTHERIA.*

BY HENRY L. K. SHAW, M. D.,

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In spite of an ever increasing experience with the antitoxin treatment of diphtheria there still remains a tendency to belittle the rôle of the Klebs-Löffler bacillus in the etiology of diphtheria and to question the efficacy of antitoxin in its treatment and for its prevention. A well known physician¹ stated before the Medical Association of the Greater City of New York last Spring that he had "never seen a case of diphtheria cured by antitoxin." At the same meeting a professor of pediatrics² in one of our leading medical schools discredited the use of antitoxin on the grounds that it was dangerous and worthless. Another man³ quoted many authorities to show that the Klebs-Löffler bacillus bore no etiological relation to diphtheria.

A recent epidemic of diphtheria in St. Margaret's House presents some points possibly of interest in this connection. This House was erected for the care of infants and small children. The infants occupy the first floor, children from one to three years of age, the second, and children from three to six years old, the third floor. Efforts are made to keep these floors as separate as possible. St. Margaret's is situated a few feet distant from the Child's Hospital where there has been a number of cases of diphtheria during the winter. The most rigid precautions were taken to prevent the contagion from spreading. All went well until March sixth, 1900, when Anna D., aged two and a half years, developed clinical symptoms of diphtheria with membrane, and the diagnosis was confirmed by a bacteriological examination. This child was admitted to the House on February twenty-seventh, a week before these symptoms appeared and the disease was no doubt contracted outside. She was immediately transferred to the isolation house. The same day immunizing doses of five hundred units of antitoxin were given to all the children with the exception of the very young infants. No other case developed. The child Anna D. was

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returned to the House on April twenty-third, after her throat had been reported bacteriologically clear. The disease was believed to have been stamped out, but on June sixteenth, eight weeks after Anna D's. return to the House, two children became feverish and examination of the throat revealed in each a diphtheritic membrane limited to the tonsils. The next day another child was taken sick whose tonsils and uvula were thickly covered with membrane. The diagnoses in these cases were confirmed bacteriologically and the children were removed to the isolation house. These cases occurred among the children who slept in the same room and played with the child Anna D. after her return from quarantine. A bacteriological examination was then made from the throats of all the children who lived on this floor. Six out of the nine cultures taken contained the Klebs-Löffler bacillus and one of these was from the throat of Anna D. The report from the Bender Laboratory called attention to the fact that her culture contained great numbers of the bacilli. No antitoxin was given to these bacteriological cases but they were placed in quarantine in the isolation house. The Klebs-Löffler bacilli in Anna D's. throat were probably overlooked when her culture was reported negative in April. We know that they may remain hidden in the tonsillar crypts where a swab will not reach them. The pressure caused by swallowing food may be sufficient to remove them or other circumstances might tend to their increase, such as congestion from a cold, etc. It would seem that the immunity afforded by the antitoxin in February lasted over three months. Margaret P., aged two years, was admitted in May and did not receive the antitoxin. She was taken ill on June seventeenth and had a very severe attack. The membrane was quite extensive and her temperature rose to 105° F. on two occasions. She was the only child on the two upper floors who had not been previously immunized and was one of the first to develop diphtheria. The four children with the Klebs Löffler bacilli who were transferred to the isolation house and constantly exposed to the infection did not contract the disease. Here the immunity lasted five months.

These cases prove without doubt that children in the sus-

ceptible age, *i. e.*, between the years of two and four, may have bacteriological diphtheria which never becomes clinical diphtheria. That it is potentially as dangerous to others will be discussed later. No further case developed among the children on this floor.

On June twenty-second, six days after the outbreak on the second floor, two well marked cases developed among the children who lived on the third floor. Cultures were taken from the throats of all these children, eleven in number, and the Klebs-Löffler bacillus was found in nine. The two children without bacilli were sent to the lower floor and the nine with bacteriological diphtheria were kept in strict quarantine on the third floor. Cultures from the throats of these children were taken about every week and when the throat of any child was reported free from the bacilli that child was disinfected and brought down stairs. No local treatment such as antiseptic sprays, inhalations, etc., was employed. Only one case of clinical membranous diphtheria developed among these children. This occurred on the seventh of July, two weeks after the first cases. Nothing could be easier than for the contagion to spread from the second to the third floor as no attempt was made before quarantining the third floor to prohibit communication between the two floors. All the throats were free from the bacilli by July sixteenth with one exception. This child was transferred to the isolation house where a pure culture of Klebs-Löffler bacilli was obtained by Dr. Elting on August fifteenth, which proved fatal within twenty-four hours to an inoculated guinea pig. This was five months after the prophylactic inoculation and six weeks after the second outbreak. This child never showed any clinical symptoms and was returned to the House early in September after her culture was free from the bacilli. There has been no recurrence of the disease, which was completely stamped out within a month. This is not the first time an epidemic of diphtheria has been cut short at the Child's Hospital by a wholesale use of antitoxin. In 1898 nine cases developed within a few days and all the children in the Hospital were immunized with five hundred units of antitoxin the result being that there was no return of the disease.

The first floor of St. Margaret's is devoted exclusively to the care of "bottle babies" and they have a special corps of nurses and maids. During the disturbance upstairs trouble was brewing here. On June seventeenth, Jessie S., aged four months, appeared sick and had a temperature of 103.2°F . The throat was clear. A slight nasal discharge was observed which became more profuse and was at times tinged with blood. A culture made from this secretion on June twentieth contained Klebs-Löffler bacilli and confirmed our suspicions. The child was given five hundred units of antitoxin and isolated. A culture from the throat on June twenty-third was reported negative but one from the nose on June twenty-seventh still revealed the Klebs-Löffler bacilli. The child made an uninterrupted recovery and was reported bacteriologically fit to return to the House on July seventh.

An infant, Edward R., was brought to the House on May thirtieth, when two weeks old, having a purulent discharge from both ears. The child was a foundling and was brought from another city and it has been impossible to obtain the previous history. On July third a cover glass smear from this discharge showed great numbers of the Klebs-Löffler bacilli. To confirm this a culture was made on July fifth and was reported positive. The child never had any fever or clinical symptoms while under observation. He was isolated but no antitoxin was administered. Subsequently several positive cultures were reported but on August seventh the culture was negative and the child was brought back to the House. Cultures were made from the throats of all the infants, twenty-three in number, on July sixth. With the exception of Edward R. none of the cultures contained the Klebs-Löffler bacillus. It is possible and most probable that the contagion spread from the two weeks old baby, Edward R. He entered, as before stated, on May thirtieth with a discharge from the ears which was found afterwards to contain numerous Klebs-Löffler bacilli—almost a pure culture in fact. The first case of diphtheria of the second series developed upstairs on the sixteenth of June and Jessie S., the infant in a neighboring bed, showed clinical signs of diphtheria on June seventeenth. There was no attempt made to isolate the infant Edward R. before the nature of the discharge was dis-

covered. The nurses who cared for him and syringed his ears handled the other babies without disinfecting their hands. They went to their rooms on the third floor as usual and while not supposed to be with the older children yet they often came in contact with them. In this way it was very easy for the germs to be transplanted on the other floors. Another means of spreading the contagion lay in the laundry. This was all done in the same room and by the same washer-women. That only one of the infants exposed to the contagion contracted the disease illustrates the natural immunity of young infants. Only fifteen out of 2711 admissions⁴ to the diphtheria pavilion in Baginsky's clinic were of infants under six months.

It is not intended in this paper to go into the morphology and life history of the Klebs-Löffler bacillus. Its significance in the throat however is not yet fully understood. That it has not been found in some cases of undoubted clinical diphtheria is probably due to imperfect technique or to the employment of improper culture media. Leading authorities are unanimous in giving to it the first etiological position and the weight of evidence supports that view. We know that the bacilli may remain in the throat or nose for several weeks after recovery and cases have been reported where they so remained for twelve months. They are also found in the throats of apparently healthy persons without any manifestations of the disease. Holt⁵ calls all cases true diphtheria in which the Klebs-Löffler bacilli are found. Macy⁶ believes that their presence in healthy throats is not merely accidental but a species of the disease even though no membrane is formed. He has had a large experience at the Willard State Hospital, where upwards of twenty thousand cultures were examined last year, and he claims that bacteriological diphtheria is potentially just as dangerous as the membranous form. Rotch⁷ says that if the Klebs-Löffler bacilli are not virulent in some throats they may become so when transferred to a different soil and he believes that all persons should be isolated until the Klebs-Löffler bacilli have disappeared from the nose and throat. Thesen⁸ in the Ullevold Hospital reports a case of bacteriological diphtheria which was followed by a post-diphtheritic accommodation paralysis. There

had been no clinical signs of diphtheria in this case. This seems to prove that a certain amount of toxin is produced in these cases and absorbed by the system.

At Willard a person who had associated with a case of bacteriological diphtheria apparently picked up enough of the bacilli on the clothing to infect a family several miles distant where there had been no diphtheria in six or seven years. A virulent case of true membranous diphtheria resulted from this visit. Dr. Macy has no doubt as to the mode of infection in this case. Aaser⁹ quarantined a child with bacteriological diphtheria. After a month a few bacilli were found and a week later he permitted the child to return home although there were a few bacilli in the throat. Four days later two younger sisters were brought to the hospital with membranous diphtheria and any other route of infection could be excluded. Park's case of an infant who had had Klebs-Löffler bacilli in the nasal discharge for some time and who communicated clinical membranous diphtheria to other members of the family, is well known.

In our epidemic the contagion started from a bacteriological case having no clinical manifestations of the disease. Instances like these can be multiplied and they tend to prove that the presence of Klebs-Löffler bacilli in any throat is pathological and dangerous.

We will not enter upon the question of compulsory quarantine. The fast accumulating evidence of their danger will soon force our Boards of Health to take a determined stand in regard to these cases of bacteriological diphtheria.

The highest aim of the physician is to prevent disease. Smallpox has almost been stamped out, leprosy is now unheard of and the plague is kept under control and within bounds. Not less notable has been the victory over diphtheria. Antitoxin has not only rid diphtheria of its terrors but it has enabled us to bring its epidemics to a standstill. The value of antitoxin in the prophylaxis of diphtheria is so great that no unprejudiced mind can deny its success in the face of the large literature and undoubted statistics. In Holt's opinion it confers almost complete immunity and he advises strongly that all exposed children be given a prophylactic dose of antitoxin. Cowes¹⁰ immunized fifty children at

St. Mary's Orphan Asylum in Boston during an epidemic of diphtheria. For three weeks no new cases developed and after that period a few mild ones. Antitoxin was again administered with no further return of the disease. Morrill¹¹ had the following results: "Of 1808 exposed patients immunized at least once every twenty-eight days with amounts of serum varying from one hundred and fifty to five hundred units, seven had diphtheria. Two of these cases occurred within twenty-four hours after the injection, in three the dose was insufficient and two in whom the time of infection came twenty-three and twenty-two days respectively after being given an amount which has so far proved sufficient when given every three weeks." Hermann Biggs¹² collected statistics from New York institutions of 1,043 cases which were immunized after being exposed to diphtheritic infection and of which number only three contracted the disease. He believes the only way to stop an epidemic is to resort to the immunization of exposed individuals with antitoxin. In the last report¹³ of the New York Foundling Hospital, the medical board "came to the conclusion that the results (of prophylactic immunization) were simply marvelous."

Last spring a number of cases of diphtheria broke out simultaneously in different buildings at Willard. The trouble seemed to be entirely among the employees. They were all immunized and the places where the disease had manifested itself were quarantined. In this way the trouble which threatened to become serious was brought to an end.

Results similar to these are reported from the German clinics. Baginsky¹⁴ thinks that the value of antitoxin in this connection has been proved beyond question. Monti¹⁵ in his recent monograph on diphtheria makes the statement that where the prophylactic dose was sufficiently high none of his exposed cases developed diphtheria. One of the rules in Widerhofer's clinic in Vienna is to give an immunizing dose of antitoxin to all the children in families where a case of diphtheria occurs. The first assistant, Dr. Folger¹⁶ said that out of more than two thousand such injections only six cases of diphtheria have occurred in their knowledge. Slawyk¹⁷ reports from Heubner's clinic that where there is a diphtheritic infection in a family and the healthy children

are given two hundred and fifty units every three weeks he has never seen a child develop the disease. A severe epidemic of diphtheria broke out in the Universitäts Kinderklinik in Prag¹⁸ last year. All the exposed children were given prophylactic doses of antitoxin, and out of one hundred and twenty-two such injections, only three developed diphtheria. These children were all sick, some seriously so, and many were in the same wards with diphtheria patients. Of the three cases who contracted the disease, one had profuse otorrhœa and hæmorrhagic nephritis with general anasarca, the second a discharging empyaema of long duration, and the third measles and whooping cough engrafted on a severe grade of rickets. Twenty-four children were immunized at St. Margaret's in March. Five of these immunized children developed clinical diphtheria and fifteen had bacteriological diphtheria. In these the Klebs-Löffler bacilli were present, while under examination, from two weeks to two months and there were no manifestations of the clinical membranous form in any of these cases. No cases of diphtheria occurred for over three months. One child entered in May and did not receive the antitoxin. This child was one of the first to be infected and the most marked and serious clinical signs were present in her case. The five cases among the immunized children were very light and made rapid recoveries. It seems to be the rule that when diphtheria develops in a previously immunized child the course of the disease will be mild, provided it does not occur too long after the immunization.

Clinicians are now inclined to give larger doses of antitoxin for the purpose of prophylaxis than were at first recommended. It has been shown that in many cases where the immunization was not successful that the dose administered was entirely too small. Morrill in summarizing says that small doses (100-250 units) given twenty-four hours before the infection will confer immunity for at least ten days while larger doses (200-500 units) will confer safety for three weeks. Monti advocates high dosage and insists that six to seven hundred units must be given to insure immunity. The amount of antitoxin that may be administered is surprising. I know of one case in Boston where sixty thousand units

were given during the course of the disease. At Ovid a child received eight thousand units and recovered from a most severe attack.

The prophylactic dose of five hundred units given to all the children over one year may seem large but it certainly was effective and no bad results attended its use. The immunity thus acquired lasted much longer than is usually reported. Our knowledge is still somewhat hazy in regard to the length of time prophylactic immunity is effective. This has been variously calculated from two weeks to two months. At St. Margaret's no clinical diphtheria occurred until three and a half months after the injection. The four children with the Klebs-Löffler bacilli and no clinical symptoms who were transferred to the isolation house with the clinical cases did not contract the disease although constantly exposed to the infection. Here the immunity lasted five months. A like period existed in eight of the nine children kept quarantined in the House.

All the clinical cases were treated solely with antitoxin and the results were most satisfactory.

The bad effects and dangerous symptoms alleged to follow the use of antitoxin have been much exaggerated. The consensus of opinion is that they do not exist when the injection technique is perfect and the best quality of serum used. At Willard over four thousand immunizing doses have been given and in only two or three were there unpleasant after effects and they were not serious in character. No ill effects resulted from our injections even when administered to an infant four months old.

One of the objects of this paper is to invite and possibly to provoke discussion.

In conclusion I wish to tender grateful recognition to Doctors Blumer and Elting for making all the bacteriological examinations at the Bender Hygienic Laboratory, and to Dr. Hun for his permission to report this outbreak.

REFERENCES.

1. WHITE. *Pediatrics*, July 15, 1900.
2. WINTERS. Discussion on Diphtheria, *ibid*.
3. HERMAN. *ibid*.
4. BAGINSKY. "Diphtherie und diphtheritischer Croup," Nothnagel's *Specielle Pathologie und Therapie*, p 52.

5. HOLT. *Diseases of Infancy and Childhood*, p. 963.
6. MACY. Communication to State Board of Health.
7. ROTCH. *The Hygienic and Medical Treatment of Children*, p 828.
8. THESEN. *Deutsche medicinische Wochenschrift*, No. 22, 1895.
9. AASER. *ibid.*
10. COWES. *Boston Medical and Surgical Journal*, November 30, 1895.
11. MORRILLE. *ibid.*
12. BIGGS. *Medical News*, No. 22, 1895.
13. Biennial Report New York Foundling Hospital, 1898-1899.
14. BAGINSKY. *loc. cit.*
15. MONTI. *Kinderheilkunde*, Heft. 10, p. 292.
16. FOLGER. Notes from a recent course of lectures.
17. SLAWYK. *Therapie der Gegenwart*, December, 1899.
18. KRAUS. *Prager medicinische Wochenschrift*, Nos. 19 and 20, 1900

DISCUSSION OF PAPER OF DR. J. COLLINS WARREN*

By ROBERT T. MORRIS, M. D.,

New York.

An interesting feature of Dr. Warren's paper describes the rapid improvement in the statistics of splenic surgery during the past decade. The improvement is due to two chief causes—the better selection of cases proper for operation and improvements in operative methods. The latter may be still further advanced to the point of lessening the present death rate markedly.

Most of the death rate in splenic surgery is due to hemorrhage and shock. Let us take up the two subjects separately for discussion, although they frequently belong together. Loss of blood in operations for removing the spleen occurs in three principal ways. If the arteries are not ligated in advance of the veins the arteries pump a large spleen so full of blood that a disastrous amount is removed together with the organ. When we have extensive adhesions of the spleen to deal with there is an insidious loss of blood that amounts to an important factor often before the vessels are ligated. After the removal of a large spleen the thin walled veins of the abdominal cavity sometimes dilate so rapidly that the patient suffers from hemorrhage into his own veins. How are we to obviate the feature of danger from loss of blood in our splenic surgery? Easily enough by simply

*On the Surgery of the Spleen. Read before the Medical Society of the State of New York, January 30, 1901.

starting an infusion of decinormal saline solution into one of the veins of the arm at the moment when the loss of blood begins to be important. In one case in which I removed an enormous spleen reaching from the diaphragm to the pelvis, and very adherent, the patient lost an amount of blood that would probably have proved fatal if I had not begun infusion at the beginning of the operation, and yet practically the patient did not have any evidence of hemorrhage, aside from the ocular evidence, either during or after the operation. This one resource will almost remove the death rate from loss of blood in splenic surgery. The infusion should not be begun until the patient begins to lose blood, and it should simply be made compensatory in amount as far as possible. The temperature of the infusion should be about 110° Fahr. at the time when the operation is begun.

The element of shock is one that can be obviated almost as nicely as the element of loss of blood. Many of the authors who speak of shock in splenic surgery seem to think that it is due to pulling upon the diaphragm and stomach. They miss the point. The shock is due to disturbance of the large branches of the sympathetic system which make a direct connection from the semi-lunar ganglia through the hilus of the spleen. These nerves are so large as to be easily seen and managed. If one is in doubt about the importance of disturbing such branches of the sympathetic system let him keep a finger upon the pulse of a patient at the moment when the pedicle of a kidney is ligated. Even the ligation of the pedicle of an ovary will make an instantaneous impression upon the vaso motors of the heart. In the spleen with its close semi-lunar connections this becomes a most serious matter and as in nephrectomy it is best to ligate blood vessels separately, taking care not to include sympathetic nerves, and then to cut away the remainder of the pedicle without ligating it at all. Do not make an *en masse* ligation of the pedicle of the spleen or of the kidney. Another point in the avoidance of shock is so well known that I merely mention it—the use of opium in advance of anesthesia. A point of great practical importance in doing away with shock is the employment of nitrous oxide for preliminary anesthesia. The patient is very quickly asleep, and he avoids the consequences

of extensive use of ether with its subsequent excretion by the mucous membrane of the stomach, and increase of shock due to that part of the vomiting which results from the excretion of ether by the gastric mucosa. This statement anticipates part of an original communication that is to be made by one of my assistants, so I wish no credit for it. The use of decinormal saline infusion lessens or obviates shock. Operations for removal of the spleen, with the employment of our very satisfactory resources of the present day, seem to me to warrant no greater death rate than operations for the removal of ovarian cysts provided that we rule out the cases that have been wisely placed outside of the pale of surgical intervention. There is some disagreement among authors as to the cases which belong to the operable class, however. It is pretty well determined that hypertrophied spleens secondary to cirrhosis of the liver, should not be removed, but they may be sutured to the abdominal wall to further carry out the principles of Talma's operation. I am interested to hear of Dr. Richardson's successful splenectomy in a case of leucocythemia. These cases have been ruled out by most authors. A good deal of criticism has been aimed at Jonnesco for removing such a large series of spleens for the cure of malaria and yet the hypertrophied spleens of malaria often require removal because of their intrinsic disturbances aside from any question of permanent cure of malaria. The statistics of Hagen—forty-three malarial spleens removed with three deaths—would perhaps have been even better if the operators had all regarded the points in operative technic which have formed a part of this discussion to-day.

Clinical and Pathological Notes

*Report of an External Urethrotomy: Wheelhouse Operation.
From the Department of Skin and Genito-Urinary Diseases,
St. Peter's Hospital Dispensary, Albany. By J. W. WILTSE,
M. D., Dispensary Physician.*

The patient, A. W., aged 48 years, presented himself at the clinic for Skin and Genito-Urinary Diseases at St. Peter's Hospital, October 17th, 1900, with the following history:

About twelve years ago he contracted gonorrhoea and chancroids, complicated by suppurating buboes with the attack. Three years ago he had an attack of apoplexy, resulting in a right-sided hemiplegia from which he made a good recovery. In August, 1899, he began to have trouble in passing urine. The stream became much smaller than formerly and there was so much spattering and spraying that the clothing was constantly stained and soiled with urine. In October, 1899, the patient went to the Homœopathic Hospital where an operation was done which gave him relief for a time.

Status Præsens.—The patient complains of desire to pass urine frequently. He can only pass a small quantity at one time and then only after the greatest effort. On first inspection of glans penis no meatus could be discovered. On closer inspection at the site of lower angle of what should be the commissure of the meatus a pin-hole opening is seen. The remainder of the site of meatus is completely occupied by scar tissue. When the patient desires to urinate, after straining and making a great effort, he manipulates the penis with the hand and a small stream of urine is projected through the meatus. The skin of the penis behind the corona shows extensive scars from what were probably serpiginous chancroids. In the perineal region at the left of the median line and about midway between the posterior border of the scrotum and the anus is the scar left by a former urinary fistula through the perineum. The right inguinal region shows scars and contractures where former suppurating buboes have been located.

Treatment.—A meatotomy was done for the opening up and restoration of the meatus. The pendulous portion of the urethra was found normal through about two and one-half inches of its length. Here strictured tissue was found which would only admit a filiform bougie. The bougie passed down through the strictured tissue for a distance of three or three and one-half inches and was then arrested and no further progress could be made. The meatus was kept open and restored by the passing of full sized sounds every third day and an attempt made at each sounding of the meatus to pass filiform bougies through the deep stricture and into the

bladder. Each effort proved unsuccessful, although the meatus had been perfectly restored. The patient at this time was passing his urine only in drops after the greatest amount of straining and effort. I resolved therefore to do a Wheelhouse operation dividing the deep stricture and restoring the normal caliber of the deep urethra.

The patient entered the Hospital on November 16th. A saline cathartic was administered in the evening, an enema given in the morning of the 17th. Pubes and scrotum were shaved. The genitals, perineum and surrounding parts were scrubbed with green soap solution, followed by alcohol and bichloride solution. A bichloride pack was applied and allowed to remain in place until the patient was anæsthetized and ready for operation. After the patient was thoroughly anæsthetized another attempt was made to pass a filiform bougie, in the hope of simplifying the operation and being able to do it with a guide. This attempt, however, failed as all previous attempts had. The filiform was withdrawn and a No. 7 French Scale tunneled catheter, the largest that would pass through that portion of the stricture not absolutely impervious to instruments, was passed down to the face of the impervious portion. An assistant then took the sound and held it firmly in the median line with its distal end impinging on the face of the stricture and the curve with its grooved surface firmly pressed against the perineum. The perineal tissues were then incised in the median line from a point near the posterior margin of the scrotum to a point about three-fourths of an inch anterior to the anal margin. The incision was carried down through the tissues and the scalpel made to enter the urethra in the groove of the sound and as near the distal end of same as possible. After entering the urethra the incision was enlarged anteriorly and posteriorly as much as possible, the sound was then turned half way round in the urethra, the distal end projecting through the wound and the sound in this position used to make traction upward and make tension on the urethra and perineal tissues. A silk ligature was then passed through the incised walls of the urethra and perineal tissues on either side and traction was made on those by assistants, so that we had traction in three directions and the best possible view of

the field in which search was to be made for the occluded urethra. Several false passages were found and explored with the probe pointed director only to result in disappointment. At last after about a half hour's search the probe entered the urethral opening and the strictured tissue was divided on the grooved director followed by a considerable flow of urine. The stricture of the posterior urethra was then dilated by the introduction of steel sounds up to and including No. 32 French Scale.

The stricture of the anterior urethra through which previous to the operation we had not been able to pass anything above No. 7 French Scale was rapidly dilated up to No. 32, while the patient still remained under ether. A short silver catheter was passed from the perineal wound into the bladder and retained there by the use of the silk ligatures previously used for making traction on the perineum and urethra. The wound was then packed with iodoform gauze and the patient put to bed. After the patient was in bed a small rubber hose was attached to the end of the catheter projecting through the wound and the other end of the hose immersed in a bottle partly filled with a five per cent. carbolic solution to avoid atmospheric infection of the bladder. The bottle was placed at a level of about one foot below the patient so that the urine would drain from the bladder through the hose and into the carbolic solution.

The catheter was left *in situ* almost four days when it was removed and the urine passed through the perineal wound into a Kelly pad and from there into a receptacle at the side of the bed.

The patient's recovery was uneventful, the temperature never going above normal except on two occasions; the first rise occurring during the afternoon and evening of the day of operation, when it reached 100 degrees; dropping back to normal the day following and remaining normal until after the first sounding, when it again went up to 100 degrees and remained there for a few hours, when it reached normal again and has remained so throughout the patient's convalescence.

The urethra now takes a No. 28 French sound and patient passes some urine through the meatus, but the perineal wound is not yet completely healed.

*Hyperplasia of the Pituitary Body with Eburnation of the Skull.**Clinical Notes by J. M. MOSHER, M. D. Pathological**Notes by GEORGE BLUMER, M. D.*

Enlargement of the pituitary body is associated with almost all fully developed cases of acromegaly. It has also been observed in connection with certain cases in which one or more of the cardinal signs of this disease were lacking. Such for example are the cases described by Chauffard as "acromégalie fruste" and by Pierre Marie as the "type carrée," in the latter class of cases the enlarged lower jaw being lacking. A relation has also been found to exist between enlargement of the pituitary and certain other trophic disorders, as the adiposis dolorosa of Dercum, and occasionally in myxœdema and cretinism. Baumgarten suggests that leontiasis ossea is due to a trophic disturbance similar to acromegaly, and Starr in reporting a case of megalocephalie supports this hypothesis, although the anatomical findings do not as a rule show any hypertrophy of the pituitary, Baumgarten alone claiming that the sella turcica is enlarged in leontiasis ossea. In the following case there was a hyperplasia of the anterior portion of the hypophysis leading to the formation of a tumor of considerable size. This was accompanied by thickening of the bones of the cranial vault, but no other signs of acromegaly.

The patient was a clergyman in his sixty-first year, educated at Rutgers College and the New Brunswick Theological Seminary. He was the second of six children, and came of a long lived race, the grand parents and great-grand parents having attained ages from seventy-four to ninety-four years. He passed through the usual children's ailments, measles, whooping cough, mumps and scarlet fever, recovering from them about as quickly as ordinarily healthy boys, without their leaving any very serious after effect. At about thirteen or fourteen years of age he developed a serious bowel trouble which resulted in an almost fatal attack of dysentery. For a long while his life was despaired of; a cousin of his own age died from the same disease in the same room where he lay. At the age of seventeen he suffered another attack of the same disease, while he was in college, from which he

recovered with difficulty. Still later, while in the army, in March, 1863, he suffered from the Camp Diarrhœa, which was epidemic in his division, no more severely however than others, and made a quick recovery. The other noticeable sickness that troubled him nearly all of his life was a severe and continuous headache. He suffered from it when only a lad of fourteen or fifteen years and apparently had it all his life. He used to attribute it to catarrh, which caused him much pain and inconvenience. He was also subject to attacks of syncope which started when he was in college. One occurred during February, 1863, at Belle Plain, Va. He had been "off color" for several days and one evening, while sitting on a log near the cook's fire he was seized suddenly, fell off the log and was taken to the hospital. He had several other spells of this sort, one in the pulpit during service. He made light of these attacks and said "when they occur stick a pin in me." They were painless and to him unaccountable. His army life was on the whole beneficial to him from every point of view. He was a splendid soldier, never shirked a duty, was never laid off by the surgeon more than a day or two and the food and excitement acted like a tonic. He was not at any period of his life robust. At fifteen he studied Latin and Greek and had mastered geometry and singing. At seventeen he was in the sophomore class in college. This early mental strain kept him spare and slender. He was five feet, six inches in height, narrow but not hollow chested. A peculiarity to be noted was the extreme length of the pedal and digital extremities; his toes were like fingers and his fingers abnormal in length. There had never been upon any of his generation any excrescences like warts, tumors or wens, although three previous generations on the maternal side abounded with them. His temperament was of the nervous and bilious type. He was a good chess player and his mind was analytic rather than synthetic.

The headaches for twenty-five years consisted of severe pains in the eyes and over the temples, often lasting two or three days and coming usually about once a month. The last year they occurred less frequently—not more than three or four times during the whole year, and were less severe.

He left for China in January 5, 1865, and returned in the autumn of 1868. While at Amoy he was sent to Formosa on account of ill health, just for a health trip. On his return to China the second time, when he had been there a little more than a year, the doctor sent him to North China. His eyes were weak and his health was failing. While in the north he grew well and strong, and as soon as he returned his health and eyes again failed. He left Amoy for home in February, 1873, with eyes bandaged. He grew well and strong here, and on the advice of his physician and oculist he never returned. After that he did faithful work for twenty-five years in pastorates in this country.

His last sickness began with severe headache on April 10, 1898. After one week he began to sit up and walk into adjoining rooms. On May 9 he was up for the last time and grew rapidly weaker in mind and body. During the last few weeks of his life he presented the symptoms of severe neurasthenia. The prostration was general, and there were no local symptoms of spasm or other motor defect. A few days before he died he presented marked hyperæsthesia of the lower extremities with slight indications of trophic disturbance. He became confused and gradually unconscious, with entire loss of eyesight.

The following is Dr. C. H. Moore's report upon the ocular conditions:

Examination made April 8, 1898. He gave the history that when he was a missionary in China in 1865 he was exposed to very bright light, and severe inflammation followed. From the history it was probably conjunctivitis. He is wearing far glasses, the same ones he has worn for twelve years.

Right: $+ .62^{\circ}$, ax. 80° : vision = $\frac{20}{xx}$ —.

Left: $-.50^s \subset 1.00^{\circ}$, ax. 90° : vision = $\frac{20}{xxx}$ +.

Vision unaided: right, = $\frac{20}{xl}$; left, = $\frac{20}{l}$

Near vision: right, $+ 2.00^s \subset 62^{\circ}$, ax. 80° , = Jaeger No. 1, at 9 inches.

left, $+ 2.00^s \subset 1.00^{\circ}$, ax. 90° , = Jaeger No. 1, at 9 inches.

Javal ophthalmometer: Each, 1.00 D. astigmatism, regular.

Ophthalmoscope: Each optic disc shows outlines somewhat indistinct, but otherwise there is no abnormal appearance about the fundus.

The patient died May 31st. The autopsy was made on the following day. Only the brain was removed. The internal organs were so changed by formalin embalming fluid that nothing could be made out in them.

The following notes are abstracted from the protocol:

The scalp is of normal thickness and shows nothing abnormal. The blood in the vessels is all clotted, presumably as a result of the formalin injection. The skull-cap is greatly thickened, especially in the region of the occipital bone. At the posterior portion of this bone it measures 1.5 c. m. in thickness. In all portions of the skull the bones are sclerotic; no diploë can be made out at any place. The bone is still translucent in the frontal regions on each side. The grooves for the blood vessels are very deep; the middle meningeal artery, although filled with blood, is barely level with the bone on both sides, so deep is the groove for it. The dura is universally adherent to the inner table and shows a moderate degree of uniform thickening. The longitudinal and lateral sinuses contain red post-mortem clots. The pia-arachnoid is everywhere translucent. The vessels both at the vertex and at the base are only slightly filled with blood. The larger vessels show no thickening of their walls. The convolutions seem flattened over both hemispheres. There is no apparent asymmetry. The fissures seem normal in arrangement.

The pons, medulla and cerebellum show no external abnormalities.

Occupying the position of the pituitary body just in front of the pons is a tumor mass of an irregularly oval shape, its long diameter running from before backward. This mass measures 5 c. m. in its longest diameter, 3 c. m. in width and 2 c. m. in thickness. The greater portion of the mass is free, one end, however, being attached to the sphenoid bone in the region of the sella turcica. The attachment in this position is quite extensive, the tumor occupying a much larger amount of territory than is usually occupied by the

pituitary gland. In order to accommodate itself it has hollowed out an opening which occupies most of the body of the sphenoid, extending both laterally and antero-posteriorly to the limits of this portion of the bone. The cavity left in the bone by the removal of the end of the tumor measures 2.5 c. m. antero-posteriorly by 2.7 c. m. laterally and is 14 m. m. in depth at its deepest part. The tip of the free portion of the tumor occupies a cavity which reaches through that portion of the brain forming the floor of the anterior cornu of the lateral ventricle on the right side, and infringes on the cavity of the ventricle. There is, however, no invasion of the brain substance by the growth. From its size the tumor naturally compresses certain of the surrounding structures; the optic commissure is flattened and ribbon-like and the anterior portions of both optic nerves where they lie against the cerebral substance are also compressed. The right olfactory nerve near its origin is also considerably compressed. The corpora albicantia seem quite flattened. On lifting up the optic commissure there is beneath it a circular opening 9 m. m. in diameter with smooth edges which communicates with the third ventricle. All the ventricles can be seen to be much dilated and contain an excess of fluid. The tumor itself has a smooth pinkish outer surface, from which project a number of broad based, wart-like excrescences varying in diameter from one to seven m. m. These are moderately firm to the feel. The main body of the tumor has a flabby feel as though it were composed of walls surrounding a cavity. At one point near the base is a small opening, easily admitting a broom straw, and communicating with a central cavity which extends to the tip of the tumor, and corresponding with this is a similar opening just behind the optic commissure which communicates with the third ventricle. Where the tumor has been cut across to separate it from the bone it has a homogeneous yellow-brown color.

On section of the tumor it is seen not to be hollow, except for a small channel in the center. The cut surface has a homogeneous yellow-brown color. Near its tip the tumor shows on one side a distinct groove, probably corresponding to a portion pressed on by the edges of the opening leading to the lateral ventricle.

Microscopic — The tumor is a cellular one. At first glance under the high power it suggests a round cell sarcoma in places. In some portions of the section, however, a distinctly alveolar arrangement can be made out with the low power. Under the high power the tumor is seen to be composed for the most part of cells of an epithelial type. They assume various shapes, presumably from mutual compression. The nuclei are rounded or oval and differ somewhat in their intensity of staining in different parts of the tumor; usually they take rather a faint stain, but in places stain quite deeply. They show a well marked chromatin network and fairly numerous karyokinetic figures. They are identical in appearance with the cells normally composing the anterior portion of the pituitary body, except that occasionally very large cells with large budding nuclei are seen in the tumor. The cells are separated into groups by delicate bands of connective tissue richly supplied with thin walled vessels. In places the divisions so found are small and look like normal pituitary substance; in other places the divisions are very large and the cells without arrangement. No colloid was seen in the tumor. Comparison of this growth with an enlarged pituitary from a case of acromegaly shows that the two growths have essentially the same characteristics. The posterior portion of the gland was not involved in the process. The process impresses one as a hyperplasia rather than a new growth in the strict sense of the word.

Editorial

A Possible Source of Error in the Micro- scopic Diagnosis of Tuberculosis

A series of observations recently made by Marmorek, and published in the *Zeitschrift für Tuberculose und Heilstättenwesen*, give rise to the suspicion that it may be possible in some instances to overlook tubercle bacilli in the various forms of tuberculous excreta, even when present in large numbers. Marmorek's experiments consisted in comparing young and old cultures of tubercle bacilli with regard to their staining process. He found that on liquid media young bacilli behave quite differently from the older ones. The young, or, as he

calls them, the primary forms, stain quite easily with watery solutions of aniline dyes, and when stained by the ordinary methods used in examining sputum often fail to retain the red dye. These results suggest the possibility of overlooking tubercle bacilli in sputum or other tuberculous excretions. The probability that the bacilli could be overlooked would be most marked in acute cases. May it not be that the reason why so few bacilli are present in the earlier stages of tuberculosis and in the acute pneumonic forms of the disease is that many of the bacilli present are of this primary form and do not take the ordinary stain? This is, of course, not necessarily the case as some tuberculous lesions may be due to toxins and not to the bacilli themselves, but the question is one worth investigating.

State Medicine

Edited by Harry Seymour Pearse, M. D.

IMPORTANT MEDICAL BILLS IN THE NEW YORK LEGISLATURE

Assembly Bill No. 832. Introduced by Mr. Kelsey. Senate Bill No. 469. Introduced by Mr. Audett. An Act: "To amend the public health law creating a state department of health and the office of commissioner of health, and abolishing the state board of health." See article, "The Passing of the State Board of Health."

Assembly Bill No. 439. An Act: "Authorizing and empowering the regents of the state of New York, to admit to practice, physicians heretofore admitted by state examining boards, in other states of the United States."

This bill is sufficiently important to justify the printing of its text: "Section 1. The regents shall admit to practice any person of good moral character, over the age of twenty-one years and who has been examined and licensed by other state examining boards, registered by the regents as maintaining standards not lower than those provided by the laws now in force and an applicant who matriculated in a New York medical school before January first, eighteen hundred and ninety-seven, and who received the degree of M. D. from a

registered medical school before May first, nineteen hundred, may without any additional or other examination on payment of a fee of twenty-five dollars to the regents and on submitting such evidence as they may require, receive from the regents an endorsement of the applicant's license or diploma, conferring upon the applicant all the rights and privileges of a regent's license to practice issued after an examination."

At first it would appear that the measure applies to but one class of men consisting of those who have been examined and licensed by other State examining boards; but it does more than that—it exempts from examination all men who matriculated in this State before January 1, 1897, or graduated before May 1, 1900. Such a sweeping exemption is manifestly unfair to all those who matriculated or graduated before these dates and were examined by the regents. There should be no exemptions at this time—after ten years of a state examination and license. Should the laws, which have placed our standards of educational requirement in medicine higher than that of any other state in the Union become honey-combed with exempting clauses, a retrogression will be difficult to avoid. The present standard certainly cannot be maintained.

Assembly Bill No. 473. Introduced by Mr. Sullivan. An Act: "To amend an act entitled 'an act to revive, amend and consolidate the general acts relating to public instruction, known as the consolidated school law, relating to teaching physiology, hygiene and narcotics.'"

This bill repeals that portion of the consolidated school law which provides for the teaching of physiology, hygiene and narcotics in schools. It has appeared in previous legislatures and always failed of passage. It is prompted by the fact that many people object to having their children taught physiology and further that the young mind should not be impressed with the actions of poisons, on the ground that gross instincts and morbid suggestions are developed. These views are intimately related to those of the anti-vivisectionists.

Assembly Bill No. 507. Introduced by Mr. Sanders. An Act: "For the protection of the public health by pre-

venting contagious diseases from spreading through the use of old bottles, rags and other materials."

Prohibits the gathering or use of bones, rags, glass or stone bottles from any dump or garbage barrel, but does not apply to the use of any offal or other material for filling in or fertilizing land.

Assembly Bill No. 527. Introduced by Mr. McKeown. An Act: "Regulating and restraining the practice of midwifery in the city of New York by others than legally authorized physicians."

This bill passed both houses of the Legislature last year and was vetoed by the Mayor of New York. It provides for the appointment of a board of examiners in midwifery from the local board of health, to examine all applicants for license to practice midwifery, and to issue the licenses; places the fee of each applicant at \$10 and requires the registration of each license annually in the office of the secretary of the local board of health. The ANNALS has always looked upon midwives as a necessary evil, and taken the ground that the wisest way to deal with it is to regulate and restrict the work of midwives, thus decreasing as much as possible the dangers of infection and malpractice.

Assembly Bill No. 678. Introduced by Mr. Lynn. Senate Bill No. 518. Introduced by Mr. McCabe. An Act: "To amend the public health law, in relation to the use of type in the publication of books, newspapers or serial literature."

Provides that no type smaller than eight point shall be used and that the lines of type shall be separated by at least two point leads. Foot-notes, indexes and reference books are excepted. The State Board of Health to enforce the provisions.

An arbitrary and impossible measure. Its enactment would mean a loss of thousands of dollars to publishers and printers; valuable book-plates would become useless, newspapers and books would be increased in size and become unmanageable; all printed matter would increase in value. Notwithstanding all this, the underlying principle is a good one—to save the eye-sight of readers and students; but it

cannot be accomplished in this manner. A problem of this character can work itself out only by evolution. There is no quick process of legal enactment that will solve it. The German people are a nation of myopes as a result of their studious habits and the character of the German letters. At this time nearly all German scientific books are printed in English letters, of fair size. The lesson has been learned after hundreds of years. It will require many generations for us to learn ours.

Assembly Bill No. 824. Introduced by Mr. Graeff. Senate Bill No. 501. Introduced by Mr. Davis. An Act: "Making an appropriation for the construction of buildings for the New York State Hospital for the treatment of incipient pulmonary tuberculosis."

Appropriates \$100,000 for the construction of, and \$20,000 for the equipment of, hospital buildings at Raybrook, the site selected by the trustees of the hospital, the State Board of Health and the Forest Preserve Board.

Assembly Bill No. 859. Introduced by Mr. Henry. An Act: "To amend the public health law, by providing for the appointment of a chief inspector of plumbing and drainage in certain cities."

Provides, that in cities where no such office has heretofore been created by law, the local health board may appoint a chief inspector of plumbing and drainage, whose compensation shall be fixed by the board. He shall be a practical plumber of not less than ten years' experience in the business of plumbing.

Assembly Bill No. 759. Introduced by Mr. Seymour. Senate Bill No. 538. Introduced by Mr. Davis. An Act: "Regulating and legalizing the practice of osteopathy in the state of New York and fixing penalties for the violation thereof."

This is essentially the same measure which appeared in the Legislature of 1898, and which died in the Assembly Committee on Public Health. It legalizes the practice of osteopathy in this State. This fact alone, without dwelling upon the details of the bill, condemns it. As a law it would give protection to a set of cranks of the worst order, and

permit them to prey upon an ignorant and credulous class of people. We hope that it will die without even the necessity of strangling, but we are led to understand that it has strong adherents, on the Assembly side at least.

THE PASSING OF THE STATE BOARD OF HEALTH

One incident of the wave of reform and economy which seems to be sweeping through the Legislature of 1901 is the wiping out of the State Board of Health. On February 14th, there was passed in the Senate—a bill which creates a “Department of Health,” consisting of a Commissioner of Health appointed by the Governor and confirmed by the Senate, whose term of office shall be four years, and whose salary shall be \$3,500 a year; and such clerical and other assistants as said Commissioner may find it necessary to employ. The Commissioner shall be appointed within twenty days after enactment.

It will be speedily passed by the Assembly and signed by the Governor.

The State Board of Health was organized in 1880 and consists of nine members, three of whom are *ex-officio*, and a Secretary who receives a salary of \$4,500 a year. Considering the resources at its command it has done excellent work, but it has always been handicapped by insufficient appropriations and a conspicuous absence of that encouragement which it could reasonably expect and which certainly was its due. There is no State whose legislative branch of government is as little in sympathy with the needs, or less mindful of the welfare, of its department of health than ours.

This measure provides further that the Commissioner of Health “shall be a physician, a graduate of an incorporated medical college, of at least ten years’ experience in the actual practice of his profession, and of skill and experience in public health duties and sanitary science.” This entitles him to \$3,500 a year. What is the standard of appreciation of technical knowledge, skill and experience that could prompt such an offer? No man which the office demands or is worthy of will accept it under the conditions created by this bill.

A single headed department of health may have advantages over a large board—that is a question for the future to determine; but if the basis of transition is economy, no improvement can possibly result and only deterioration in the character of the work can be expected. In matters pertaining to public health it is a false and dangerous motive.

The world of public medicine cannot have a grain of praise for the conditions existing in New York State at the present time.

THE SO-CALLED "CHRISTIAN SCIENCE" BILL

The February number of the ANNALS contained the text of a bill (Assembly Bill No. 167, introduced by Mr. Bell) which defines specifically the application of the phrase "practice of medicine" as found in the statutes. One of its purposes is to drive from the State a large class of cranks who treat disease by peculiar methods and who have not complied with the medical laws of the State, and in addition, to protect a credulous and deluded people from the mechanisms of Christian Scientists, osteopaths, hydropaths, etc., which mechanisms have recently led to death and the exposure of hundreds to contagious disease.

The Committee on Public Health, to which the bill was referred, held three hearings; each was crowded with opponents of the measure. The opticians and manufacturers of proprietary articles were assured that it would not affect them and withdrew their objections. There still remained in opposition, however, Christian Scientists and osteopaths by the hundreds whose arguments acted only as a boomerang. By their own mouths they convinced the healthy minds of the dangers to life and health that the practice of their principles would entail. The result was natural and what it should have been—a victory for science over fanaticism and charlatanism. Whether the Legislature will be guided by this result remains to be seen. In the legislatures of California and Missouri, there are at the present time measures having precisely the same purport—their final disposition is awaited with interest.

In relation to the Christian Scientists:—In the minds of many the question has risen as to the advisability of control

ling these faddists, for the reason that in dealing legally with religious sects, the word "control" is always construed as meaning "persecution" and means the gaining of sympathizers with and adherents to the cause, whatever it may be. A strange corollary to civilization is the existence of occultism, mysticism, fanaticism, fetichism, etc., relics of barbarism and ignorance which we seem unable to shake off. Sects innumerable have sprung up and strangled themselves by their own beliefs. Will this be the result with Christian Science, and would it not be the wisest course to let it wear itself out? If the practice of its precepts did not endanger life and health, yes; but it does, and here is the chief motive for placing this class under legal restriction. It would be criminal negligence not to at least attempt to restrain it. Many may not appreciate this fact: that the incentives of the measure in question are moral as well as legal.

As to the osteopaths and the various other "paths" who treat diseases by "peculiar methods"—they are not worthy of discussion and should be trampled down like rank weeds.

In Memoriam

ROBERT V. K. MONTFORT, M. D.

Dr. R. V. K. Montfort died at his home at Newburgh, N. Y., December 18, 1900, aged 65. Dr. Montfort graduated from the Albany Medical College with the class of 1856. Immediately after graduation he located in Newburgh, and in 1859 was elected Superintendent of schools. He resigned in 1862 to accept a commission as assistant surgeon of the 124th New York Volunteer Infantry, known as one of the fighting New York regiments, on account of the heavy losses. He was mustered out of the service in June, 1865, at the close of the war, as surgeon. In 1866 he was appointed first Health Officer of the City of Newburgh, and served four years. He was physician to the Alms House in 1865 and 1866; physician to the Home for the Friendless, 1866-1882; a member of the staff of St. Luke's Hospital from its organization until 1892 (fifteen years); in 1868 was assistant cattle

commissioner to investigate the outbreak of Texas Fever in Orange county, and inspector of the State Board of Health, to investigate an outbreak of supposed typhus fever among the Italian laborers employed in the construction of the West Shore railroad. He was a member of the Orange County Medical Society and has served as its president; a member of the Newburgh Bay Medical Society. In 1872 he was for the second time appointed Superintendent of Schools, and with one or two intervals served in this office until his death. In 1894-5 he served as president of the State Council of Superintendents; he was also a member of the National Council of Superintendents. Dr. Montfort was married twice, first to Margaret Daughaday in 1861, who died in 1864, and to Theodosia B. Crowell in 1864. He had three children. He served as secretary of the Newburgh Centennial Committee in 1883; was a member of Ellis Post, 52, G. A. R., and served three times as its commander; he was also a member of the Third Corps Reunion, the oldest of the army societies formed during the Civil War. In 1896, Dr. Montfort was the historian of his class, and presented at the alumni reunion of the Albany Medical College a completed record of the members of his class.

JOHN E. LOSEE, M. D.

Dr. Losee, who graduated from the Albany Medical College with the class of 1852, died at his home in Upper Red Hook, N. Y., on December 22, 1900, aged seventy-four years.

Dr. Losee was born in Dutchess county, September 16th, 1826, and removed to Northumberland, Saratoga county, where he was educated. After graduation he entered the New York Hospital, where he remained until December 19th, 1853, at which date he located at Upper Red Hook, N. Y., where he continued in active practice until a year prior to his death. He was a member of the Reformed Church and of the Dutchess County Medical Society.

Dr. John H. Cotter writes the following tribute: "Dr. Losee was a man of very pleasing address. His nature was genial and sympathetic, and no person was so unpopular or obscure as to forfeit his kind attention. Among his neigh-

boring brethren he was an especial favorite as a consultant; not alone for the benefit to be derived from his ready advice after long experience, but his kindly presence was cheering to the sick, and a feeling of perfect confidence in the attending physician, was ever restored in the mind of the patient thereafter. He leaves a widow and two sons, both of whom are practicing physicians."

WILLIAM H. EDSALL, M.D.

Dr. Edsall, a member of the class of 1877, A. M. C., died at Highland Falls, N. Y., February 9, 1901, aged 49 years. He leaves a wife and daughter. Dr. Edsall was a member of several societies and had served as health officer for a number of years.

Medical News

Edited by H. Judson Lipes, M.D.

MEDICAL SOCIETY OF THE COUNTY OF ALBANY.—A regular meeting of the Society was held February 13, 1901, in Alumni Hall. The meeting was called to order at 9 P. M., the President, Dr. Wm. Hails, in the chair. The following members were present: Drs. Bailey, Ball, Blumer, Carroll, W. H. George, Hailes, L. Hale, W. S. Hale, Happel, Hennessy, Hinman, Jenkins, LeBrun, Lomax, Macdonald, MacFarlane, Neuman, Pearse, Richardson, Sautter, Edgar A. Vander Veer, Wiltse.

1. Reading of the minutes of the last meeting.

Dr. NEUMAN moved that the minutes be adopted as printed in the ANNALS. The motion was seconded and carried.

2. There were no minutes of special meetings.

3. No new names were proposed for membership.

4. No reports or resolutions were presented.

5. No special communications were presented.

6. Reading of papers.

Dr. ANDREW MACFARLANE read a paper on the Diagnosis of Cancer of the Stomach.

At the conclusion of Dr. MacFarlane's paper the President suggested that as all the papers were on kindred subjects the discussion could be deferred until all had been read.

Dr. NEUMAN then read his paper on the Value of the Chemical Tests in Gastric Carcinoma.

Dr. MACDONALD followed with his paper on Surgical Intervention in Cancer of the Stomach.

The President then declared the papers open to discussion. In doing so he reminded the Society that a case of total extirpation of the stomach

was exhibited before them last year. He understood that the patient had since died of a recurrence and that no autopsy had been permitted. He expressed the thought that with the improvement of methods of chemical and physical diagnosis carcinoma of the stomach could be diagnosed earlier than it is at present and that radical operations would be more often undertaken. When he thought of total extirpation it seemed foolhardy on account of the fixity of the duodenum and the distance between the cardiac end of the stomach and duodenum. He had spoken to Dr. Harvie as to how he was able to unite these parts in his case, and Dr. Harvie had told him that the duodenum had been gradually pulled toward the cardiac orifice by the contraction of the tumor so that he was able to bring the two ends together. He thought that the suggestion of saving as much stomach as possible was a good one. Dr. Bailey questioned Dr. Macdonald regarding the after treatment of these cases in the way of food.

Dr. MACFARLANE spoke concerning the presence of lactic acid in the gastric contents in diseases other than stomach diseases. He thought that the matter was of no great importance as we are not likely to confound these other conditions with gastric carcinoma. His experience had led him to regard the presence of lactic acid as an important sign. He had seen two cases in the last year which emphasized this. In one case no tumor was apparent until six weeks or two months after a diagnosis of carcinoma based on the presence of lactic acid had been made. The absence of hydrochloric acid was not so valuable he thought as it was so common in other stomach conditions, as gastritis and various neuroses. Lactic acid on the other hand was uncommon and indicated either carcinoma or interference with motility. He referred to a recent article by Kocher in which he agreed substantially with Dr. Macdonald's suggestions. He thought that we must not wait for positive diagnosis in cases of suspected carcinoma, but that in cases with suspicious stomach symptoms we should co-operate with the surgeon and operate early. The danger from operation is not nearly so great in early cases.

Dr. NEUMAN agreed with Dr. MacFarlane that the presence of lactic acid in the stomach juice is of no great importance in general diseases. Its presence depends on three factors, the want of motility, reduction in secretion, and absence of hydrochloric acid. These conditions sometimes occurred in diseases where cancer was not present. The great fear is that we may wait too long before operation. In speaking of the significance of lactic acid, the point he wished to bring out was that it is not well to depend on a single sign, such as the presence of lactic acid, but that we must study all the different signs and make our diagnosis and operate as a result of this study. He merely mentioned the presence of lactic acid in other diseases to show that it is probably more frequently present than we usually suspect. He stated that the tests for lactic acid were not as good as they might be. Uffleman's as modified by Strauss was a fairly good rough test, and Boas' was more accurate but more difficult. He stated that in going over histories for Ewald he found sixteen to seventeen per cent. of cases in which carcinoma was found in which lactic acid was absent. He mentioned the cases of carcinoma grafted on old ulcer in which hyperchlorhydria

was almost always present. He thought perhaps the hyperchlorhydria acted as an irritant in these cases. He mentioned the fact which was recently brought out by Kuttner, and which is perhaps not generally known, that the symptoms of carcinoma of the stomach generally begin suddenly.

Dr. MACDONALD, in reply to Dr. Bailey, stated that a division of opinion existed regarding feeding in these cases. Nearly every one gives food almost directly in small installments. In his cases he gave nothing but sterilized hot water for twenty-four hours. During this time rectal feeding or normal salt solution with whisky per rectum was given. After that time he gave egg albumen with lemon juice sugar, or carbonated water, not more than an ounce at a time. With this he sometimes gave beef juice in drachm doses with liquid peptonoids. Almost anything could be given in the first week except milk. In his experience milk caused indigestion and distension. He advised giving nothing but albuminous food for a week or ten days, and in cases where the Murphy's button had been used he advised giving liquid food until the button had been passed. He stated that where even large portions of the stomach had been removed patient could digest food quite easily after ten days. He pleaded for early intervention in these cases, and stated that even in late cases gastro-enterotomy extended life and made the patient much more comfortable. He had one case on which he performed this operation a year ago which was still alive and in fair condition.

There appearing no further business the Society adjourned.

GEORGE BLUMER, *Secretary*.

WILLIAM HAILES, *President*.

ASSOCIATION OF THE ALUMNI OF THE ALBANY MEDICAL COLLEGE. — A meeting of the Executive Committee was held in the College Library on February 15, 1901. In the absence of the President, Dr. Crothers, Dr. Tucker was called to the chair. Routine business was transacted. The Chairman announced that the annual commencement of the college would be held on Wednesday, May 1, 1901, and the annual reunion and dinner of the association were appointed for that day. The usual committees were selected. The following communication from Dr. Crothers was received, ordered noted in the minutes, published in the ALBANY MEDICAL ANNALS, and mailed with the usual announcements to graduates of the college:

Appeal to the Alumni of the Albany Medical College. — At the beginning of this new century, it seems fitting that an appeal should be made to all the graduates of the Albany Medical College to attend the next annual meeting in April and unite in closer sympathy and interest in the college and its work. The problems of medicine are increasing and the methods of instruction are passing through great changes and evolutions, which have a vital interest to every one of us. The Albany Medical College has always been prominent for the marked personality of its teaching, and its graduates everywhere have carried out with them a certain independence of character and thought, which

has marked their career in every station of life. To perpetuate and intensify this peculiarity should be the pride and ambition of every alumnus. The future of every college depends largely upon the loyalty and support of its graduates, and with their co-operation and assistance the college and its work will always attain the highest degree of success. The direction of students into its halls is a small part of the alumni influence. Beyond this is the larger field where the gathering of means and measures to widen the methods of instruction, and open new paths for original work, appears. No graduate can leave a greater monument to his name and memory than to provide facilities which will enable the college to make a more perfect study of the laws and forces which lengthen life and diminish its miseries. Every alumnus can contribute to this, in some way or measure, not by wealth, but by personal assistance and influence. Why should not the Albany Medical College be the best institution in the land for the most advanced teaching of medical science? Why should not its teachers lead in the front ranks of scientific exploration and discoveries? The alumni can make this possible, and by united efforts at their annual meetings and by persistent work, sympathy, and interest, this will become a reality. Every graduate who lays down the burden of his daily life to attend these yearly meetings, and join in raising the character of the college work, will get new inspiration, and be amply rewarded with new faith and stronger convictions for his daily work. The old college is changing rapidly with every new advance of science. It needs endowment for its Chairs, and for special work in new fields. It needs means for better training of more capable men; it needs help for larger discoveries of facts, which will lighten the burdens and duties of every one of its graduates. Beyond this, the old college is pleased to show its alumni what progress has been made in the past, and the direction of its present and future work, and its triumphs to be enjoyed and obstacles which are to be overcome. It is these facts which bring out something of the old personality which the college has built up, and has so largely entered into our lives, and will go down into the future as long as we live. We appeal both officially and personally to every graduate to attend the May meeting and are confident that with a united effort we shall have the largest, most helpful, and practical gathering of the alumni ever held. In this way, we shall make this year the starting point for greater advances and larger growth of the college and its work that will go on far beyond our day and generation.

THOMAS D. CROTHERS, 1865,

President, Alumni, A. M. C.

ALBANY HOSPITAL: BOARD OF GOVERNORS.—At the recent annual election for governors of the Albany Hospital the following were elected members: Benjamin Walworth Arnold, Lewis Deitz, Henry Hun, M. D., Albert Hessberg, Charles R. Knowles, J. Townsend Lansing, Ariel Lathrop, William L. Learned, Gustavus Michaelis, John G. Myers, Archibald J. McClure, James McCredie, Dudley Olcott, Jesse W. Potts, Robert C. Pruyn, Robert G. Scherer, Albert Vander Veer, M. D., William J. Walker, Samuel B. Ward, M. D., William H. Weaver.

On the afternoon of February 10th, the Board held their annual meeting for the purpose of electing officers for the present year.

Under the new by-laws all the officers were voted for by ballot. The result was as follows: President, James McCredie; vice-president, William H. Weaver; secretary, Gustavus Michaelis; treasurer, C. R. Knowles; executive committee, John G. Myers, C. R. Knowles and Albert Vander Veer, M. D.; law committee, Hon. W. L. Learned, Robert G. Scherer and Albert Hessberg; treasurer of endowment fund, Dudley Olcott.

President McCredie was requested to appoint a committee of three to formulate a table showing diseases and results of treatment at the hospital during the year. The committee was named as follows: Jesse W. Potts, Willis G. Macdonald, M. D., and Howard Van Rensselaer, M. D.

UNION UNDERGRADUATES' SMOKER.—The first "smoker" given by the undergraduates of all departments of Union University was held on the evening of February 9th, at the rooms of the Albany Press Club. The purpose of these affairs is to form a closer tie between the students of the four departments, law, medicine, pharmacy, and the college at Schenectady. After words of welcome from the president of the Press Club, Mr. William S. Dyer, Dr. A. G. Root, representing the Medical College; Dayton F. Smith, the Law School, and G. L. Shelly, the College, spoke to the students assembled. The affair was very successful.

THE ALBANY GUILD FOR THE CARE OF THE SICK POOR.—Statistics for January, 1901: Number of new cases, 64; 1 dispensary case, receiving home care; 44 other charity cases, and 19 moderate income cases. Number of visits with nursing treatment, 500; for professional supervision of convalescents, 187; total for month, 687. Cases were reported to the Guild by four of the Health physicians and by twenty-three other physicians. Special Obstetrical Department: 1 case; source, head nurse of Guild; applied, December 15, 1900; confined, January 25, 1901; dismissed, February 5. Obstetrician, Dr. H. Judson Lipes; number of calls, 10; students in attendance, 2; number of calls, 18; nurses in charge, 2 graduates, 1 assistant; number of visits, 7; total number of visits, 35; child still-born.

The work of January closes the Guild year. The statistics presented at the annual meeting of the Board of Managers showed growth in all branches of the work. The number of patients is 673 against 482 for last year, an increase of 191 cases. The Guild nurses made 9,109 visits, an increase of 908 over last year. The cases were reported by the city physicians, by all of the Health physicians and by 73 other physicians.

THE CHILD'S HOSPITAL; TWENTY-FIFTH ANNUAL REPORT.—The quarter century annual report of the Child's Hospital for the year ending September 30, 1900, has been received. The Medical Staff reports the largest number of cases ever treated in one year in the Hospital. Of the 382 cases of disease treated, 215 were discharged cured, 73 were improved, eleven died, and at the end of the year 83 were remaining in the Hospital under treatment. During the year the Hospital suffered from epidemic of diph-

theria (18 cases), measles (24 cases), German measles (4 cases), and of grip (12 cases.) The Staff has been enlarged, as previously announced, by the addition to the Medical Department of Drs. F. C. Curtis, A. MacFarlane and H. L. K. Shaw, to the Surgical Department, Drs. C. E. Davis, C. H. Traver and A. W. Elting.

The deep and heartfelt gratitude of the Managers is expressed to Mr. and Mrs. Trask, of Saratoga, for their gracious and beautiful gift of the St. Christina *Home*, which adds, to an untold degree, comfort and health and delight to the summer outing of the children in Saratoga.

The Treasurer's report shows the excellent condition of the financial affairs of the Hospital.

BIBLIOGRAPHIA MEDICA: SPECIAL EDITIONS FOR EACH SCIENCE.—The French Institute of Bibliography has recently sent out its announcements for 1901. The first number of the complete edition of the Bibliographia Medica for the year appeared on the 15th of February, and this index will continue to appear every three months, with more than three thousand references in each number. But this year there will appear six special parts, besides the complete publication, designed to meet the requirements of specialists who do not care for the complete edition. The work is divided into the following:

- (1). Anatomy, Physiology, and Veterinary Science.
- (2). Hygiene, Legal Medicine.
- (3). Therapeutics and Materia Medica.
- (4). General and Special Medicine.
- (5). General and Special Surgery.
- (6). Gynecology, Obstetrics, and Pediatrics.

THE NEW MOUNT SINAI HOSPITAL IN NEW YORK CITY.—Work is to be begun immediately on the new Mount Sinai Hospital, which is to cover the entire block between Fifth and Madison avenues and 100th and 101st streets, and is to cost, including the site, \$1,600,000. Of this amount all but \$225,000 has now been subscribed. There will be in all nine buildings. Their general style of architecture will be Romanesque and the material used will be brick, with stone trimmings. The executive building and wings will occupy the 100th street side. On the 101st street front will be the building for surgical and medical cases which will have accommodations for about 360 patients. The dispensary building and training school will be on the Madison Avenue corners, while the private hospital, perhaps the most ornate structure of all, will have the frontage in Fifth Avenue. Accommodations for the children's pavilion, kitchens, laundry, isolation and pathological buildings will be found on the 101st street side.—(*Medical News*, February 2nd.)

RESOLUTIONS CONDEMNING THE DIVISION OF FEES OFFERED BY THE COMMITTEE OF THE CHICAGO MEDICAL SOCIETY.—The committee to which were referred the resolutions introduced at a meeting of the Chicago Medical Society on January 23rd, made the following report at a meeting held the week following: *Resolved*, That the offering or giving of a commission, or

percentage of a fee, by the consulting physician or operating surgeon, or the asking or receiving of such a fee or commission in any guise whatsoever by the physician referring the case, is dishonest, disreputable and unethical, unless such an arrangement be made with the full knowledge of the patient. *Resolved*, Further, That a violation of this resolution shall subject the offender to expulsion from the Society. These resolutions were unanimously adopted by a rising vote. The following resolution was also introduced and likewise adopted: *Resolved*, That it be the sense of the Society, that the fees ordinarily received by the attending physician in connection with cases requiring surgical operations in common practice are not adequate, and that the physician should have the support of the Society to increase his charges under such circumstances.

VACANCIES IN THE MEDICAL CORPS OF THE UNITED STATES ARMY.—A "Circular of Information for Candidates Seeking Appointment in the Medical Corps of the United States Army" has recently been issued from the Surgeon-General's office. As a result of the reorganization of the army by Act of Congress approved February 2, 1901, there are one hundred and twenty-nine original vacancies as assistant surgeon to be filled. The prescribed age limit of candidates will be rigidly adhered to and it will be useless for those who are more than twenty-nine years of age to apply unless they have had previous service as mentioned in the circular. The requirement of hospital experience or its equivalent in private practice will also be insisted upon. Hospital work as a student will not be regarded as fulfilling this requirement. Two years of private practice will be considered an equivalent of one year's hospital experience. Army medical boards will be convened at an early day in Washington and in San Francisco, and examinations will be begun as soon as possible. Copies of the circular may be obtained upon application to the Surgeon-General's office, Washington, D. C.

STATE BOARD OF HEALTH OF NEW YORK—DECEMBER BULLETIN.—The following remarks were made in the December Bulletin of the State Board of Health relative to the monthly reports of the year:

The number of deaths from all causes reported for the year in the Monthly Bulletin is 128,468; this exceeds the mortality of 1899 by 6,647 and the average of the past five years by 8,000. Besides these reported deaths there were 1,600 returned too late for report, making the death rate for the year 18.5, which is the estimated average rate for past five years. The increase over last year has been in all the sanitary districts except those of the central and southern parts of the State and is largest in the maritime district, where there were 5,600 more deaths than in 1899.

The *infant mortality* was 4,000 greater than last year, the increase being general, but the percentage of deaths under five years, 30.5, is the average of past years. The mid-summer rate was low.

The *zymotic mortality* was 13.7 per cent. of the total, against an average of 14.6, grip, not included, relatively lowering it. *Typhoid fever* was unusually prevalent in the Autumn, causing 1,948 deaths, 350 above the average, of which 200 were in the maritime district. *Measles* prevailed

to excess in all parts of the State, the 1,333 deaths being 300 above the average. *Scarlet fever* was less than usually prevalent. *Diphtheria*, increasing from the low prevalence of recent years, had yet a mortality 500 below the average. *Diarrhoeal diseases* caused the average mortality of about 8,000 deaths, notably increasing the late Summer and Autumn mortality of the rural parts of the State rather than the urban, the maritime district having had fewer diarrhoeal deaths than the average.

Small-pox was brought from outside to seventeen places during the first half of the year, without spread; from August to November the State was free from it; then a traveling minstrel troupe left it at three localities in the eastern part of the State, whence it spread, and at the end of the year it exists at five places and their vicinities, with promise of further spread. Of 14 deaths, 4 have occurred outside New York City. In December one death from small-pox occurred in Schenectady and one in Gloversville, besides five in New York City.

The *Grip* epidemic of the year was unusually severe, lasted six months and probably added 11,500 to the mortality; it appears in deaths from local diseases, chiefly the acute respiratory, the number of which consequently is very high, and in unclassified causes of death.

APPEAL OF THE WOMAN'S CHRISTIAN TEMPERANCE UNION TO PHYSICIANS.—The following circular appeal has been sent out for publication by the President of the Woman's Christian Temperance Union—Mrs. L. M. N. Stevens:

"The National Woman's Christian Temperance Union has been active for twenty-seven years in combating the evils of alcoholic liquor drinking. Among its most effective allies have been those physicians who do not prescribe alcoholic liquors, allowing alcohol a very limited sphere of usefulness, or none at all. We are endeavoring to bring the teachings of such physicians to the people and we believe that much good is being accomplished thereby. It is apparent, however, that if the evils of liquor drinking (ill-health, poverty, insanity and crime) are ever to be fully abated, the medical profession must take a more active part in this much desired reform. They, more than any others, can disabuse the public mind of old-time errors concerning the use of or necessity for alcohol, either as a beverage or for medicinal purposes. It would seem to be the duty of those to whom the public looks for guidance in all things pertaining to health, to continue to make the most careful investigations of the nature of alcohol and its effects upon the human system, and to see to it that *their medical practice and teaching, as well as their personal example*, is upon the side of safety.

"The New York School of Clinical Medicine, a postgraduate college for physicians, has just now opened a new department for the study of the constitutional effects of alcohol and other drugs. An eminent Russian physician, in a paper read before the International Medical Congress, held at Moscow, August, 1897, said:—'The struggle against alcoholism merits as much attention on the part of the medical profession as that against the various epidemics, and the success of the struggle is impossible without the active sympathies of the medical profession.'

"Realizing the truth of the foregoing statement, the National Woman's Christian Temperance Union, at the beginning of this new century, appeals to physicians to aid in the efforts being made to remove as far as possible all tendencies and temptations toward the formation of the drink habit. The medical profession can wield a powerful influence by bringing to the knowledge of the people the consensus of scientific opinion and practical observation, on the disastrous results which follow the habitual and indiscriminate use of alcohol. Particularly would we ask physicians to warn parents against the home prescription of alcohol and against the use of proprietary medicines containing alcohol or other narcotic drugs, by showing them the danger and by teaching them a better way."

MEDICAL SOCIETY OF THE STATE OF NEW YORK; NINETY-FIFTH ANNUAL MEETING —The ninety-fifth annual meeting was held at Albany, January 29, 30, and 31, 1901. The President of the Society, Dr. A. M. Phelps, of New York, opened the meeting with his inaugural address and made several recommendations of considerable importance which were later acted upon by a committee, appointed for that purpose, consisting of Drs. Ely (Rochester) Vander Veer (Albany) and Van Fleet (New York).

Drs. Roosa (New York), Macdonald (Albany), and Rowe (Rochester) were named as a commission for nominating members for vacancies in the Board of State Examiners. The report of the Committee on Publication was adopted. It recommended the publication of the Transactions of the Society at \$1.00 per volume, as last year, in order to put it further within the means of every practitioner. The recommendation of the Committee on Ethics was to admit to representation in the Society the following local bodies: Gloversville and Johnstown Medical Society, Medical Society of Long Island, German Medical Society of Brooklyn and the West End Medical Society of New York. The Committee on Hygiene reported the law providing for the establishment of a State Sanatorium for Consumptives and recommended the passage of laws for better housing of the poor; for the making of gonorrhea and syphilis amenable to the boards of health like all communicable diseases, subject to notice and registration; and for the better prevention of typhoid fever by improved water supply. A motion was carried making official the interest of the Society in the tenement-house reform. As Auditing Committee Drs. Bulkley (New York), Brush (Mt. Vernon), and Elsner (Syracuse) were appointed, and their report was adopted later. The Committee on Legislation recommended the appointment of a designated lawyer who shall by study familiarize himself with the medical laws and be in position to advise the Society better than any general lawyer not so specializing; also the support of the present bills before the Legislature, especially that defining the practice of medicine in this State. Its report was accepted and the following resolution was offered: *Resolved*, That a Special Committee be appointed to appear before the Committee on Public Health of the Legislature in charge of this bill. Dr. Elsner, of Syracuse, was made chairman of this Committee with power to appoint his associates.

The Prize Committee made the award to Dr. Lucien Howe, of Buffalo,

for his essay on "The Measurement of the Interocular Base Line and the Size of the Meter Angle."

On motion of Dr. Elsner, of Syracuse, a resolution was adopted committing the Society to combat the present effort of the Legislature to cut down estimates for the State care of the insane.

The following gentlemen were elected by districts to the Nominating Committee: Drs. A. Vander Veer, Albany, chairman; 1st District, A. E. Davis, New York City; 2nd District, W. H. Zabriskie, Glen Cove; 3rd District, W. G. Tucker, Albany; 4th District, R. G. Wilding, Malone; 5th District, Nathan Jacobson, Syracuse; 6th District, L. Coville, Ithaca; 7th District, W. J. Herriman, Rochester; 8th District, H. R. Hotchkiss, Buffalo.

The subject of the ninety-fifth presidential address, delivered by Dr. A. M. Phelps, of New York, was "The Radical Cure of Inguinal Hernia."

The Nominating Committee reported the following named gentlemen as officers for the ensuing year: Dr. H. L. Elsner, of Syracuse, President; Dr. L. N. Lanehart, of Hempstead, Vice-President; Dr. F. C. Curtis, of Albany, Secretary; Dr. O. D. Ball, of Albany, Treasurer. These gentlemen were duly elected and the meeting adjourned.

THE ALBANY COLLEGE OF PHARMACY.—The commencement of the Albany College of Pharmacy will be held at Odd Fellows' Hall on the evening of March 12th, 1901. The annual meeting of the Alumni Association will be held in the afternoon of the same day in Alumni Hall and a banquet in the evening following the commencement, at the Hotel Ten Eyck.

THE BIOLOGICAL LABORATORIES OF PARKE, DAVIS AND COMPANY.—This firm announces the engagement of Professor Joseph Mc Farland, M. D., of Philadelphia, to conduct experiments into the etiology, the pathology, the toxic products, and possible cures of the various infections.

Book Reviews

Sexual Debility in Man. By F. R. STURGIS, M. D., formerly Clinical Professor of Venereal Diseases in the Medical Department of the University of the City of New York; sometime Visiting Surgeon to the Venereal Division of the City Charity Hospital, Blackwell's Island; Member of the American Association of Genito-Urinary Surgeons, etc. 6¼x8¾ inches. Pages 432. Cloth, \$3 00. E. B. Treat & Co., 241-3 West 23rd Street, New York City.

The nature of this book and its purpose are well indicated in the brief preface, from which the following quotation is made: "The reason for writing this book was not to fill 'a long-felt want,' but rather 'to introduce to the reading medical public sundry opinions the writer holds upon sexual weakness in men, which, although they may be at variance with ideas generally received in this country, he is convinced, from experience, are correct.'"

Brief opening chapters are devoted to the gross anatomy, and the physiology of the male sexual organs. The subjects, Masturbation, Spermatorrhœa, Pollutions, Prostatorrhœa, Sexual Impotence and Sterility, are there discussed in order.

That indulgence in the habit of masturbation, as generally believed, always and of necessity leads to mental and physical degeneration, the author emphatically denies. In support of this opinion, he calls attention to the great disparity existing between those cases of insanity and degeneration caused by masturbation and the almost universal practice of the habit at one time or another during life. He points out, when deterioration does occur, it takes place in those who have acquired, or more frequently inherited, a weakened or unstable nervous system, and suggests further, that excessive masturbation is in consequence of, and not a cause of, such mental, or physical, impairment.

He distinguishes rightly between masturbation and onanism, insisting that the latter term shall be applied to *coitus interruptus* only, and says that the evils of this latter undesirable practice also have been greatly magnified in the popular mind.

Spermatorrhœa and Pollutions are discussed in separate chapters, and it is plainly shown that two clear and distinct conditions are involved, each a disease by itself, often due to different causes, and each requiring different treatment.

In these chapters, as well as in those remaining, the diagnosis, prognosis, and treatment of the various conditions are clearly set forth. Throughout the book numerous cases illustrative of the author's opinions are quoted, both from his own experience and the writings of others. Plates, a complete index and list of references are added at the end of the book.

The work seems admirably adapted to help correct some erroneous impressions, which until recently have been quite generally existent. If through its perusal, by physicians who have formerly treated these subjects lightly, those suffering from the conditions discussed shall obtain more careful consideration and more rational treatment, the author's object will be attained.

LYMAN ASA JONES.

Manual of the Diseases of the Eye. For Students and General Practitioners, with 243 Original Illustrations Including 12 Colored Figures. By CHARLES H. MAY, M. D., Chief of Clinic and Instructor in Ophthalmology, Eye Department, College of Physicians and Surgeons. New York: William Wood & Company, 1900.

Dr. May has given the student a compact, well-constructed and admirable pocket manual. It should be thoroughly appreciated by the undergraduate as the author had a peculiarly difficult task to perform. The average text-book of ophthalmology is wholly beyond the student, not necessarily beyond his comprehension, but in the sense that he has not the time to devote to the problems of the advanced works. There is a spreading conviction that the study of the diseases of the eye should be post-graduate work, and that the student cannot hope to obtain more than the most superficial knowledge of the subject while in college. This feeling and

the crowding of the curricula of the colleges has led to the necessity for simple works containing the elementary principles of optics and ophthalmology. The author has recognized this necessity, aimed to meet it and succeeded.

The text is refreshingly simple, the facts well put and the fundamental principles emphasized and always in the foreground. There are some illusions, however. The student will not find it easy to learn the use of the ophthalmoscope, neither will he find retinoscopy *easily learnt*; though everyone will heartily agree with the author that it is *quick* and *accurate*. But it requires weeks of patient work in the dark room with the schematic eye and the living subject to attain any degree of accuracy and speed. This of course the undergraduate student cannot do.

On the whole the work will prove satisfactory and be welcomed by the student, also by the general practitioner who is looking for ungarnished facts in a field which is more or less strange to him. H. S. P.

Professional Education in the United States. By HENRY L. TAYLOR, Ph. D., and JAMES RUSSEL PARSONS, JR., M. A. Being part of the 113th Annual Report of the Regents of the University of the State of New York, 1900.

The Department of the Regents of the University of the State of New York, in its last annual report, has compiled in one volume, a series of papers on Professional Education in the United States, which will be of inestimable value to universities, colleges, societies composed of professional men, health boards, state examining boards and legislative committees, as a book of reference and for its comprehensive statistical tables. It gives the history of Theology, Law, Medicine, Dentistry, Pharmacy and Veterinary Science, from the beginning of their teaching in the United States up to the present time.

About one-third of the volume is devoted to Medicine and aside from the comparisons of the growths of the individual sciences made in the first few pages of the work, this section is the only one of great interest or value to the medical profession. It follows closely the gradual steps in the development of medical teaching from the first lectures delivered by Dr. William Hunter of Newport R. I., in 1752, to the State control of the practice of medicine at the present time; gives the histories of the early medical schools, the establishment and influence of the various societies, the medical sects, midwifery, hygiene and of State medicine. It gives the important data concerning every medical college in the country, and the laws governing the study and practice of medicine in every State in the union.

By far the most complete compilation of facts and information concerning technical instruction it will receive its well merited recognition in the educational world. H. S. P.

Report of the New York State Board of Health for the Year 1898. Being the Nineteenth Annual Report of the Board, Submitted to the Legislature, February 13, 1899.

In addition to the vital statistical records of the year and reports of

numerous investigations of water supplies, sewage systems, garbage disposal systems and examinations of potable waters, it furnishes in detail the results of the work of the officers and various committees for the year.

The faithful and aggressive work of the tuberculous committee is bearing fruit and its members report a growing appreciation of the cattle owners to the fact that their herds must be free from tuberculosis, that where the committee was formerly antagonized, its assistance and advice are now sought and that this very important preventive measure against tubercular infection is thoroughly organized.

Dr. F. C. Curtis makes a report of the epidemic of small pox which occurred that year, originating from a traveling theatrical troupe and numbering some three hundred cases. It is accompanied by very good photographs of some of the cases in the eruptive stage. In his report as delegate to the convention of the American Public Health Association, Dr. Curtis expresses himself as adverse to the adoption of the Bertillon classification of causes of death then under consideration for general use and states his reasons clearly.

The report speaks well for the activity and earnestness of the Board.

H. S. P.

Transactions of the Medical Society of the State of New York. For the Year 1900. Published by the Society.

One of the most interesting and valuable reports yet issued by the Society. The papers, taken as a whole, are remarkable for their exposition of the recent thought and work in medicine and surgery. The series of seven excellent papers on "State Care of Tuberculous Patients" with the discussion which followed and the report of the committee on Hygiene were the chief influences in the subsequent enactment of a law establishing a State Hospital for Tuberculous Patients.

Among those who read papers were: Drs. A. Jacobi, W. Gill Wylie, Roswell Park, S. Oakley Vander Poel, William Mabon, A. M. Phelps, George H. Fox, Andrew MacFarlane and George Blumer. In all there were forty-three papers in addition to the address of the president, Dr. W. G. Macdonald, and addresses by the Rev. Dr. A. V. V. Raymond and the Rev. Dr. James M. Buckley.

The Report of the Committee on Legislation is this year supplemented by a list of the bills relating to medicine presented in the legislature of 1900, and indicates a rapidly growing field for the work of this committee. In the past ten years the State has become a powerful factor in its relations to the teaching and practice of the sciences and has developed this committee into a responsible and important body, more extensive in its work than any other committee in the society.

[Copies of "Transactions" can be had by forwarding one dollar to the secretary, Dr. F. C. Curtis, Albany, N. Y.]

H. S. P.

Physicians' Manual of Therapeutics, Referring especially to the Products of the Pharmaceutical and Biological Laboratories of Parke, Davis & Company. Flexible morocco: 12 mo: pp. 526: Detroit, 1900.

This manual is arranged in eight parts, entitled respectively: "Thera-

peutic Suggestions," "Antidotes to Poisons," "Differential Diagnosis of Eruptive Fevers," "Equivalents of Weights and Measures," "Equivalents of Imperial Measure Units," "Approximate Measures," "Table of Thermometric Equivalents," and "Materia Medica."

Part one is entitled "Therapeutic Suggestions," and, as its title indicates, comprises various useful hints on the prophylaxis and treatment of diseases, the names of which appear in alphabetical order, as sub-heads. A number of useful tables have been arranged to assist the inquirer in the differential diagnosis of the exanthemata, the calculation of metric values, thermometric equivalents, etc. The body of the book is given over to the department of "Materia Medica" which is in brief an alphabetic catalogue of drugs and seems to be thoroughly complete and up-to-date. No secret preparations are mentioned nor is mention made of antiquated or obsolete remedies. The various preparations of the different drugs, such as pills, tablets, capsules, elixirs, are alphabetically listed under their respective heads and may be found without confusion or delay. The printer and bookbinder have done their work well.

Current Medical Literature

MEDICINE

Edited by Samuel B. Ward, M. D.

The Rhythmical Compression of the Heart for Resuscitation. (La compressione ritmica del cuore pel richiamo alla vita.)

BATELLI. *Gazet. degli ospedal. e delle cliniche*, July 3, 1900.

The writer has made a number of studies concerning the restoration of the functions of the heart and nervous system after a complete anæmia. He produced this anæmia on full grown dogs, arresting the heart beat either by electricity, suffocation or chloroform narcosis. When the pulsations of the heart had completely ceased he opened the thorax of the dog and made rhythmical compression of the ventricles. He succeeded in bringing these dogs back to life for a time, but never for longer than twenty-two hours. He concluded from this that there was a possibility of applying the same process with success to the human being in cases where the failure of the heart was due to the same causes. Tuffier and Hallion two years ago in studying cases of death due to chloroform narcosis arrived at the same conclusions. They succeeded in restoring to life definitely dogs who had complete syncope lasting several minutes, due to chloroform narcosis. The opening and closure of the thoracic wound was performed without resection of the ribs, a fact to which they attributed their success in not losing the animals. The clinical application of this fact was tried upon a man of twenty-four years who was found collapsed on the fourth day after an operation. Tuffier and Hallion proceeded first to produce artificial respiration, combined with rhythmical traction of the tongue but without success. They then decided to open the third intercostal space, and after draining the pericardium practiced rhythmical compression to the number of sixty to eighty on the ventricles. The arterial

pulsations then became perceptible, and the patient opened his eyes, moved his head, looked about and recognized the physician, but after two or three minutes the pulse began to become weak and finally ceased but became again slightly noticeable under the influence of fresh rhythmical compressions. The third attempt failed. The autopsy showed the presence of a coagulum in the left branch of the pulmonary artery, which without doubt was sufficient to destroy life. There was one point to be established; namely, when shall we look upon the ordinary measures such as artificial respiration and rhythmical traction on the tongue, as no longer efficient in any given case; All three observers have found that compression of the heart is still successful in a dog when other means appear impotent. But on the other hand Batelli did not succeed in reanimating the heart after its spontaneous contractions had ceased for ten minutes. For this reason it would be interesting to know with regard to the human being how long after a cessation of heart beat the compression of the ventricles would be successful.

W. H. H.

Concerning Colicky Pains. (Ueber Kolikschmerzen.)

ROBERT LUCKE. *Wiener klinische Wochenschrift*, July 5, 1900.

By colicky pains, are understood more or less severe intermittent pains either taking their origin from the organs of the abdomen or projected into the abdominal cavity. These pains must also have a cramp-like character. Colicky pains may originate from diseases of the gastro-intestinal canal, or of the large abdominal glands, as the pancreas and kidneys, as well as of their excretory ducts. Furthermore, it is possible that these pains may originate from the nerves supplying these organs as well as from the central nervous system. Among the conditions giving rise to colicky pains may be mentioned stenosis of the pylorus, intestinal catarrh, intestinal stenosis, intestinal obstruction, gall stone disease, inflammation of the kidneys, urinary calculi, inflammation and tumors of the pancreas and pancreatic calculi.

The old idea was that colicky pains were caused by tetanic muscular contractions. This can scarcely be true for these pains may occur in organs with little or no muscular tissue. It is far more probable that such pains are due to an abnormal increase of the pressure inside of the organs, which pressure may be caused by a great variety of conditions. In the case of the gall bladder, a rapid increase of the fluid contents as a result of inflammatory changes is often the cause of the colicky pains. The inflammatory process itself may in certain instances have something to do with the production of the colicky pain. In the case of the intestine, both the fluids and the gases, causing an over distension, may give rise to the pain. It has also been shown that a sudden increase of the pressure in the kidneys may cause an attack of renal colic when the ureters are absolutely intact. Such a colic may be caused by torsion of the vessels in a movable kidney, or by sudden congestion of malignant vascular tumors of the kidneys. The writer believes colicky pain to be a pain of acute distension. If the distension develops gradually, the colicky pains will usually be absent.

Hanot's Cirrhosis. (Zur Hanot'schen Cirrhose.)

HASENCLEVER. *Zeitschrift für klinische Medizin, Band XLI, Heft 1-4, 1900.*

The differentiation of the forms of hepatic cirrhosis has always been difficult and undecided, but was partially determined in 1875 by Hanot's association of chronic icterus with the hypertrophic type. Icterus is not invariable in Hanot's cirrhosis, but often appears early, increases in intensity until the fatal termination, and is a most important symptom, just as obstruction of the portal circulation is prominent in Laënnec's cirrhosis. French investigators have proposed a pathological--anatomical scheme for the consideration of hepatic cirrhosis, by dividing the lesions into the insular, unilobular, interlobular and extralobular forms. The last group includes the cases of atrophic portal cirrhosis, the first the "cirrhoses d'origine biliaire." The hypertrophic liver, as the kidney, may pass into a condition of secondary contraction, producing a third form midway between Laënnec's and Hanot's cirrhosis. Icterus may appear in the first form and ascites in the latter, but the time of its appearance and its intensity differ.

Senator has summed up the conditions of these various forms in four principal classes:

(1) Enlargement of the liver depends upon the amount and the character of the new connective tissue and the condition of the parenchyma. If there be no contraction of the connective tissue, the organ remains enlarged, the functions are retained; this is typical Hanot's cirrhosis. In other cases the contraction of the connective tissue results in diminution of the organ: typical Laënnec's cirrhosis. Under these Senator includes two sub-forms, portal hypertrophic cirrhosis, continuing to death, and a diminished liver with portal cirrhosis and icterus.

(2) If the bile cannot escape, or more bile is formed, icterus supervenes, as the hepatic lymph is easily poured into the blood. Early destruction of the parenchyma with diminished secretion of bile and no obstruction, constitutes Laënnec's cirrhosis, without icterus.

(3) Ascites, distention of the veins of the abdominal parietes, and of the intestinal canal, result from portal stasis, occurring in Laënnec's cirrhosis, with chronic mesenteric periphlebitis.

(4) Finally, enlargement of the spleen is not known in interstitial hepatitis. Stasis cannot be the sole cause. Probably the common cause (alcohol, syphilis, malaria) affects the spleen.

Senator consequently derives the following classification:

1. Portal (Laënnec's) granular atrophy of the liver.
 - a. Portal hepatic cirrhosis with hypertrophy.
 - b. Portal hepatic cirrhosis with icterus.
2. Biliary cirrhosis with ensuing atrophy.
 - a. Biliary cirrhosis with enlargement of the spleen.
3. Hanot's hypertrophic hepatic cirrhosis with chronic icterus.

Concerning the Utility of Rectal Injections of Artificial Serum in the Treatment of Typhoid Fever. (De l'utilité des lavements de sérum artificiel dans le traitement de la fièvre typhoïde.)

J. BAYLAC. *Bulletin général de thérapeutique*, September 30, 1900.

The use of artificial serum has been praised during the last few years as a remedy in a great number of severe intoxications. The writer reviews the various reports made, and states the results of its use in a number of cases of typhoid fever. Other observers have obtained especially favorable results in cases of intestinal hæmorrhage. The writer wishes more particularly to advocate the use of clysters of artificial serum as a routine practice in the disease, rather than as a last resort in critical cases. By its simplicity the rectal method is superior to either intravenous injections or the subcutaneous use, and should be employed in conjunction with ordinary methods: intestinal disinfection, milk diet, cold baths, as indicated by the conditions. From five hundred to one thousand cubic centimetres are to be employed at each injection, of a solution of boiled water, at fifteen degrees, Centigrade, containing five grammes of chloride of sodium to the litre.

The results are seen in changes in the excretion of urine, in the pulse and temperature, and in the digestion and nervous functions. Patients who have been passing from 450 to 600 cubic centimetres of urine in the twenty-four hours, increase the quantity to from 500 to 2,000 cubic centimetres after the enteroclysis. The temperature drops from five-tenths to six-tenths of a degree. The nervous symptoms (headache, insomnia, prostration) are noticeably modified. The secretion of saliva is re-established, the tongue becomes moist, thirst is diminished, the abdomen more yielding and less painful, the stools are more frequent and abundant. The artificial serum seems to act here as a disinfectant. The duration of the disease is also diminished, and relapses are rare. Secondary infections are extremely rare. The mortality is also reduced, only one death having occurred in sixteen cases.

These results show, in conclusion, that saline enemata constitute a valuable therapeutic measure against typhoid fever. They diminish the fever, reduce to the minimum the formation of toxines, prevent retention and accelerate the excretion of urine; in short, they reduce the virulence of the disease, and place the organism in a condition to resist the secondary infections.

DERMATOLOGY

Edited by F. C. Curtis, M. D.

On the Study of Hereditary Syphilis in the Second Generation. (Beitrag zum Studium der hereditären Syphilis in der zweiten Generation.)

E. FOURNIER. *Wiener klinische Wochenschrift*, No. 43, 1900.

Not many statistics concerning the progeny of parents affected with hereditary syphilis have been published. Fournier has made a careful study of forty-six marriages, where either both the husband and wife had hereditary syphilis, or the mother was syphilitic and the father healthy.

One hundred and forty-three pregnancies resulted from these marriages, out of which there were forty-three abortions, thirty-nine still born infants, and only sixty-three children lived. Nearly all of these sixty-three children showed stigmata of degeneration, dystrophies, etc.

He found one hundred and eight lesions among these children, the most frequent of which were defects of the eyes and teeth. These results show that the sequelæ of syphilis affect the children of the second generation as markedly as those of the first. We can expect that the effects are seen even unto the third and fourth generations.

The Light Treatment in Lupus.

HENRY WALDO. *The Bristol Medico-Chirurgical Journal*, September, 1900.

1. The chemical rays of the sun or electric light can produce inflammation of the skin. 2. They can produce an effect through the skin. 3. They can kill microbes on, in or close under the skin. Sunburn is due to the action of the ultra-violet rays; this effect is shared, in a less degree, by the other more refrangible rays of the spectrum, the visible violet and blue rays. These rays blacken silver chlorid, in glass tubes, under the skin of animals. This effect is more easily produced when the intervening tissues are rendered nearly bloodless. Sunlight has bactericidal power, dependent especially upon the blue, violet and ultra-violet rays. Dr. Stephen Mackenzie has made practical application of these facts, in the London Hospital. The bactericidal, chemical rays are concentrated, and the burning ones eliminated. Sunlight is collected through a hollow, plano-convex lens, eight to sixteen inches in diameter, filled with a bright blue, ammoniacal solution of copper sulphat. After having traversed this lens, the light is still too warm, hence it is made to pass through a lens about one inch in diameter, likewise hollow, through which passes a stream of cold water; this lens is pressed against the part being treated, to aid in rendering the part bloodless. The light from an electric arc lamp is very rich in chemical rays; it should be of from fifty to eighty amperes. These have more therapeutic efficacy than sunlight, and less heat effect. A seance may last an hour, and the requisite electric light is expensive, hence sunlight is preferable, partly because of the psychical benefit of the bright environment. The affected skin is pressed with a glass spatula, this showing the yellow lupoid nodules present, besides helping render the area bloodless. The area is cleansed with oil of sesame, and the diseased area ringed with an anilin blue pencil. No heat effect results. The tubercle bacilli are destroyed, but the healthy skin is not affected. The process is slow, requiring months. Mucous membranes are not tractable by this method.

Proposed Solution of the Leprosy Problem.

JONATHAN HUTCHINSON. *The London Polyclinic*, September, 1900.

It is not easy to devise experiments which should settle the dispute between the contagionists and the dietists, as to the cause of leprosy. The sentimentality of the age would call it inhuman to feed the inmates of a penal institution dried fish if it were supposed that such a diet would

cause the partakers in it to have leprosy. If, however, the same diet were used, without ulterior object, no objection could properly be made. If some contagionist could so feed a group of a hundred confined Boxers, he might plead not guilty of attempting to make them worse, by such a diet. The diet should be mainly rice, with an *ad libitum* supply of salted, dried fish, and of any condiment made of fish, that was of use in the district. Fresh vegetables and other articles might be liberally supplied, but the staple articles should be the two named. It is especially among rice-fed populations that a small quantity of fish seems efficient for the production of leprosy. In order to establish a standard of comparison, another hundred convicts of the same class should be fed on the same diet, with the substitution of flesh meat for fish, and the total exclusion of the latter. If, under such conditions, the one jail supplied a liberal percentage of lepers, and the other only a few, a lesson would have been learned which might become the means of saving many lives, and preventing a vast amount of misery.

There does not appear to be any object in trying more experiments as regards the inoculation of leprosy, even if such were legitimate. Already enough has been done to prove that the disease is not easily transferred, and it is not necessary to do more. The demonstration that once in a thousand times inoculation might succeed, even if it were obtained, would not much concern our opinions as to the nature of the malady. The most extreme dietist might freely concede as much. As yet, all experiments by inoculation—and they have been many—have failed.

A Contribution to the Treatment of Scabies. (Beitrag zur Behandlung der Scabies.)

RICHARD SACHS. *Deutsche medicinische Wochenschrift*, September 27, 1900.

The proper remedy for scabies is one that will positively kill the itch mite, does not irritate the skin too much, has no toxic action, and causes no unpleasant complications, such as coloring the skin and linen. The author mentions the older remedies that have been used in Neisser's clinic, in Breslau, for this condition, such as B.-naphtol, styrax, Peru-balsam, sulphur, etc. Of these B.-naphtol, used according to Kaposi's method, has proved itself to be the best. The objection to all these remedies, however, is that they cause irritation of the skin. This manifests itself in different forms, *i. e.*, eczema, urticaria, dermatitis, etc. This irritation occurs particularly in children, and in individuals who are in poor general health. B.-naphtol and styrax should be used carefully, (particularly when there are erosions), on account of their toxic action. The author suggests the use of a new remedy, which he has tried in thirty-five cases of scabies. This is a synthetic product known as Peruol, and is a thin, colorless, and almost odorless oil. Animals were inoculated subcutaneously with two cubic centimetres of Peruol mixed with six cubic centimetres of castor oil, without causing any toxic symptoms whatever. In order to test the ability of Peruol to destroy the itch mite, the following experiments were made: Itch mites were removed from their burrows, placed on a cover

glass warmed to 32° C., and the action of a number of different drugs studied. When all movements of the itch mite had ceased, it was put in olive oil, and the cover glass again warmed to 32° C. If then the itch mite remained motionless for a long time, it was considered dead. The results with a number of well-known remedies for scabies, with the length of time the itch mite was immersed in each, were as follows: Balsam Peru from twenty minutes to one-half hour, styrax forty to fifty minutes, sulphur thirty minutes to an hour and a half, B-naphtol (ten per cent.) forty minutes to one hour, petroleum fifty to fifty-five hours, castor oil fifty to sixty hours, and Peruol thirty minutes to one hour. The experiments proved that the most valuable remedies for scabies were styrax, B-naphtol, and Peruol. After proving, by the experiments on animals, that Peruol was a safe remedy, it was used in the clinic as follows: A mixture of one part of Peruol to three of castor oil was thoroughly rubbed into the patient's skin, with the exception of the head and neck. If the Peruol did not irritate the skin, it was first thoroughly cleaned with soap. Three inunctions were made during thirty-six hours, after which the itch mites were usually all destroyed. Thirty-five cases were treated in all. No irritation of the skin was noticed, and in some a single rubbing in of the oil was sufficient to stop the itching, and on the following day no live itch mites could be found. Of these thirty-five patients, fifteen were children, the youngest being four months old.

PSYCHIATRY.

Edited by G. Alder Blumer, M. D.

The Delusion of Reptilian Possession. (Ueber den Wahn der Reptilien-besessenheit.)

W. V. BECHTEREW. *Centralblatt für Nervenheilkunde und Psychiatrie*, November, 1900.

The mental disturbances in which the dominant idea is control of the person by some evil spirit have long been observed. These conditions are more frequent in middle age, but have been seen in senile conditions, and are in a certain measure inspired and influenced by the personal and religious environment of the victim, who is naturally prone to a perversion of ideas which develop upon his faith and beliefs. In Christian lands, possession by devils is not an infrequent form of mental deviation; in other lands, as, *e. g.*, Japan, the introduction of foxes into the body is complained of as possible, the disorder being recognized as "alopekomania." As a development from these states are seen instances of suggestions of witchcraft, and finally the belief in the transformation of the human being into animals, especially wolves. These last two forms do not now appear very frequently, but the spiritual and mystic tendencies of the times are shown in the occasional cases in which belief is shown in the effects of incantations and in possession by the devil. There is, however, a still further manifestation of the same order of beliefs in the delusion that different snakes, frogs, or other reptiles, have gained access to the interior of the body. The victims of these delusions think that these reptiles have gained access

through the open mouth, and generally the patient can recall some occasion, when sleeping on the grass or in a barn, when such an opportunity had been given. The writer reports several cases of this character, the patients beseeching to be relieved of their disagreeable tenant, and describing various sensations indicating its presence, as scratching, or gnawing, or movements of its body. In some cases there were no indications of hallucinations of other senses or of other areas than those involved in these visceral manifestations. The explanation, of course, lies in the peculiar disturbance of sensation, which, in susceptible minds, gives rise to the delusions, and the beliefs that the croaking of frogs, or the hissing of snakes, is heard. Such cases are to be regarded as analogous with those of delusions of demoniacal possession, occur in hysterical subjects, and have a basis in hallucinations.

Paludism and General Paralysis. (Contribution à l'étude des rapports de l'impaludism et de la paralysie générale.)

MARANDON DE MONTYEL. *Revue de médecine*, November 10, 1900.

The writer refers to the scant literature upon the effect of malaria in the production of general paralysis, and in the majority of the reported cases shows that the diagnosis was at fault, or that some other operative cause, as syphilis, insolation or trauma, existed, and was not given due importance. The most scientific and exact contribution which tends to show a direct relation of the two diseases is that of Lemoine and Chaumier. The writer has observed eight cases of unmistakable paludism, either of tertian or quartan fever, or some undisputed chronic infection, in which general paralysis, or pseudo-general paralysis, supervened, and from the study of these cases, in all their bearings, he has derived the following conclusions:

1. Acute malaria may cause progressive general paralysis, or pseudo-general paralysis, in predisposed persons.

2. Chronic malaria may cause progressive general paralysis, not only in predisposed persons, but probably also, in exceptional instances, may create the disease in persons in whom there is no latent tendency.

3. Acute malaria may be a cause of precocious general paralysis in predisposed subjects.

4. Malarial manifestations which occur during the course of general paralysis often aggravate the cerebral congestion and precipitate the unfavorable termination of the case.

5. Cases of progressive general paralysis, which are submitted to the influence of paludism, either acute or chronic, develop an unfavorable course very rapidly.

6. The inter-relations of malaria and progressive general paralysis are incontestable facts; nevertheless, they frequently escape observation.

7. The results of the writer's observations show that the pathological anatomy and the symptomatology of general paralysis originating in malarial infection present no special differential characteristics.

Psoriasis with Insanity; Thyroid Treatment; Recovery.

H. DE MAINE ALEXANDER. *The Lancet*, December 8, 1900.

The patient was a man, aged thirty-three, who was admitted to the Perth District Asylum on March 3, 1898. He was a servant in a country house. He had developed psoriasis eight months previously, and was treated medically without much improvement. He became depressed and left his situation. He wandered about the country for a day or two, and then gave himself up to the police, as he was "frightened" of himself, and had suicidal feelings. He was certified as insane. Psoriasis was well marked on the extremities, the buttocks, and the back; it was more diffuse on the chest. He was depressed, suspicious, inclined to impulsiveness, and he asserted that he was suffering from "the bad-disorder," and that his body was "crawling with lice." His answers to questions were irrelevant, and his memory was impaired. Thyroid tabloids were given in fifteen-grain doses, three times a day after food, and he was placed upon a farinaceous diet. A change in his mental condition was noted on the third day, when he awoke from his confused lethargy, appeared quite collected, read a newspaper, and took an interest in his surroundings. His temperature never rose above 99.8° F., nor the pulse rate above 120 per minute. Perspiration was marked throughout. The psoriasis had entirely disappeared by the end of the fourth week. The patient lost one stone in weight, but very soon put on flesh again, with an ultimate gain of four pounds. He resumed his work, and had had no further return of the skin affection, or mental trouble, eighteen months later.

The Mechanism of Thought. (Zur Mechanik des Gedächtnisses.)

ALBERT ADAMKIEWICZ. *Zeitschrift für klinische Medicin*, xl. 5 and 6, 1900.

Every manifestation of life is due to an excitation, and this excitation may be material, originating in an impression within or without the organism, or it may be immaterial, originating in a mental act. All organs possess the property of responding to an excitation, as, *e. g.*, the secretion of the gastric juice in response to the desire for food. This action on the part of the stomach, once performed, is repeated at more or less regular intervals, showing a "memory" existing in the stomach, which leads to reproduction of its function. The writer uses this illustration in proof of the purely material character of the memory, and urges that the memories established in the brain are entirely analogous, and formed upon a purely material basis, rather than upon a mental origin. He cites the case of a child of two years, who was permitted to hear the music from an instrument called the "ariston," which was produced by the revolution of perforated papers upon a disc cylinder. There were twenty-five different tunes, and in a short time the child was able to identify these tunes, and to select the perforated discs which produced them. This was done independently of any printed marks upon the discs. It is thus shown that there was no mental action involved, and it is further demonstrated that an adult was unable to make the same selections as the child. The action

on the part of the child was simply a mechanical recognition of the association of certain forms of the discs with certain sounds. As the child grew older there was no elaboration of this ability. The writer concludes from this, that the infantile brain possessed the peculiarity of receiving impressions, independently of its mental development; in other words, that there was a substructure ready for these impressions, which was purely an anatomical characteristic, joined with an impressionability, and that from the memories thus established, mental action eventually resulted. He urges from this that the mental manifestations are grafted upon a purely mechanical or physical basis, and he compares this capability with that of the wax cylinder of a phonograph for the reception, registration and reproduction of sounds.

He then discusses the different conditions of the brain in fineness of structure, consistency and blood supply, at different periods of life, showing the relations these changes bear to the capacity for receiving and retaining impressions, the greater capability being in youth, and gradually diminishing with the advance of life, until almost destroyed in the involutionary period of advanced age. He further shows the effects of disease upon this property, as in the various forms of sclerosis and softening of the brain, due either to parenchymatous changes or to variations in the character and quantity of the blood supply. He believes, in conclusion, that the power of memory has nothing to do with the mental ability and that memory is nothing else than a physical function upon which the psychical function is established.

PATHOLOGY.

Edited by George Blumer, M. D.

Note Upon Some Points Connected with the Pathological Anatomy of Cancer of the Stomach. (Note sur quelques points de l'anatomie pathologique du cancer de l'estomac.)

B. CUNEO, *Revue de chirurgie*, April, 1900.

The writer undertakes to study (1) the mode of local extension of carcinoma of the stomach, and (2) the condition of the lymphatic glands in the early course of carcinoma of the stomach. He calls attention to three very important points in connection with carcinoma of the stomach, (1) the early extension of the process beneath the mucosa, (2) the tendency of cancer to travel toward the lesser curvature, and (3) the almost constant integrity of the duodenum. The tendency toward extension beneath the mucosa has led such surgeons as Czerny, Mikulicz and others to give the neoplasm a margin of at least three centimetres. The invasion of the lesser curvature takes place through the lymphatics, for the great current in the lymphatics of the stomach is toward the lesser curvature. The writer especially emphasizes the necessity of removing a considerable portion of the lesser curvature, even though there may be little or no evidences of involvement.

Though there are but very few cases on record in which the duodenum has been found involved in moderately early carcinoma of the stomach, still the writer advises the resection of at least two centimeters of the

duodenum in order that all possibility of a recurrence in that organ may be avoided. The fact that there is a tendency for carcinoma not to extend for a time beyond the first group of glands to which the lymphatics of the involved area drain affords a much better prognosis in early operations for carcinoma of the stomach, provided the glands are carefully removed.

The writer introduces the term immediate adenopathy for the involvement of the first group of glands to which the lymphatics drain, and distant adenopathy for the involvement of groups of glands secondary to involvement of the first group. In thirteen cases of gastrectomy in which the writer examined the lymphatic glands in the region of the stomach he found involvement in eleven. The coronary group, *i. e.*, along the lesser curvature are most frequently involved. In about half the cases he found carcinomatous involvement of the lymphatic vessels leading to the glands about the stomach. From this study he concludes that it is necessary to remove all the so-called para stomachal glands, and if possible to remove them in the same piece with the tumor. The writer concludes the article with some remarks regarding the technical difficulties encountered in the removal of all the lymphatic glands connected with the stomach.

Myeloma in its Anatomical and Clinical Relations. (Das Myelom in anatomischer und klinischer Beziehung.)

KARL WINKLER, *Archiv für pathologische Anatomie und Physiologie und für klinische Medizin. Band 161, Heft 2, August, 1900.*

Winkler reports a case of this rare condition, and very thoroughly discusses it, particularly from a pathological standpoint. He states that the clinical picture is variable. Sometimes there are well marked deformities of the spinal column and of the whole thorax, so that we have the picture of a general disease of the skeleton, or there may be only neuralgia-like pains in the bones and joints, with rises in temperature of a remittent character, so that the whole affection calls to mind an acute infectious process. In other cases there may be an entire failure of marked signs, whilst the blood examination may show changes in the constitution of the blood, which speaks for a well-marked disturbance of blood formation. In the majority of cases an examination of the urine shows the presence of albumose.

After reporting his own case, which was a typical one of myeloma attacking the bones of the vertebræ, ribs and cranium, Winkler discusses the type of new growth which is found in these cases. He describes it as a growth made up entirely of small, round cells, similar to those normally found in the bone marrow, separated by a fine connective tissue reticulum. This growth always originates in the bone marrow, destroys the bone substance as it progresses, and may finally break through the periosteum, and attacks the neighboring tissues by extension. It has never been known, however, to give rise to metastases. Accompanying this new growth there was found on the part of the periosteum a definite effort to form new bone.

Winkler discusses the affections of bone, which might possibly be confounded with myeloma.

Among the general diseases of the bone he speaks of the changes occurring in Hodgson's disease and leukæmia, but these are not confined to the bones with red marrow, and are, furthermore, localized rather than diffuse affections of the marrow. These diseases are also distinguishable clinically from myeloma by the fact that the lymph glands are involved, which never occurs in the latter disease. The true tumors of bone, either of periosteal or medullary origin, can be distinguished by their history of sharp localization, at first by the fact that they give rise to metastases in the inner organs; histologically, also, they usually present an entirely different picture.

The author speaks of a form of multiple bone tumor described by Marckwald as intravascular endothelioma, which is easily distinguished microscopically from myeloma. Clinically, it may give rise to similar deformities of the thorax.

The author concludes by stating that myeloma must be considered as a perfectly distinctive and definite clinical entity, and that it is a homologous new growth of the bone marrow due to a high grade hyperplasia of the same, which attacks the red marrow of the vertebræ, ribs and skull bones. He thinks that the name "myeloma" is an excellent one, and should be retained in preference to some others which are given by the earlier writers.

An Experimental Contribution to the Study of Tuberculous Toxæmia.
(*Experimentelle Beiträge zur Kenntnis der tuberkulösen Tox-
hämie.*)

E. MARAGLIANO, *Zeitschrift für Tuberkulose und Heilstättenwesen*, Band 1, Heft 4, 1900.

In this series of studies Maragliano endeavored to show experimentally that the blood and the urine of tuberculous patients contained definitely toxic substances. His method of procedure was in case of the blood to use the blood itself in a fresh state, a glycerine extract of the blood or the blood serum. The animals used were mice, guinea pigs and rabbits. The preparations of blood were introduced either subcutaneously, intraperitoneally or intravenously. The presence of the toxine was recognized by the pathological changes which it produced in the organs, namely, a very marked visceral congestion; by the pyrogenic effect produced during the life of the animal, and by the fact that the poison could be neutralized by introducing with it a tuberculous anti-toxin serum. The results of these various preparations of blood were to cause the death of the animal in a large majority of instances, the animal during life showing great loss of body weight and elevations in temperature. In the case of some animals death did not take place, but even in these animals the loss of weight was very marked. In all instances control experiments were made by inoculating animals in a similar manner with blood preparations from non-tuberculous individuals. The experiments with urine were made in a similar

way with material obtained by treating the urinary precipitate, and these which were also controlled by parallel experiments with healthy urine showed a marked toxicity of the urinary sediment.

The author concludes as the result of his work that in tuberculous individuals with the clinical signs of toxæmia, the unaltered blood, the glycerine extract of the same, the blood serum and the urinary sediment have marked toxic properties on healthy and tuberculous animals; that these toxic properties produce a picture similar to that of tuberculin poisoning; and that the working of the poison is neutralized by the use of a tuberculous anti-toxine.

The Parasitology of Hanot's Disease. (Zur Parasitologie der Hanot'schen Krankheit.)

N. N. KIRIKOFF. *St. Petersburger medicinische Wochenschrift*, 1900, No. 37, September 16.

The author discovered in blood taken from the fingers of four patients suffering with hypertrophic icteric cirrhosis of the liver, and in cultures developed from the same sources, a diplococcus, which he describes as round or oval, and sometimes with approximating surfaces, resembling the gonococcus. He describes fully the morphological characteristics of the diplococcus, which he proposes to call the "*diplococcus Hanot*," reviews the literature, and refers to the experiments of Adami upon animals, in which the bacteriological relations of "Pictou cattle disease" were sought to be determined, a disease in which there were diffuse cirrhosis of the liver, and affections of the stomach, lymphatic glands and spleen, presenting certain similarities to the ailment described as Hanot's disease, in human beings.

Kirikoff further found in the blood of his patients, and the cultures developed from it, certain free, round, square, oblong or spindle-formed bodies, presenting pigment granules and nuclei, whose characteristics he describes. These bodies have been taken by some observers to be altered red blood corpuscles, but appear to be of parasitic nature, and have been thought by Boix to be similar to the parasites of paludism. The author gives a brief synopsis of the four cases, and concludes that the disease known as hypertrophic icteric cirrhosis of the liver, at any rate in some cases, is a chronic septicæmia (bacteriæmia), in which parasites of bacterial or of other nature play a causative part. The presence of microbes and the possibility of an increase in their virulence are in accord with the clinical manifestations, as the temporary remissions, the periods of fever and the not infrequent terminal picture of a severe infectious icterus. As to the questions of the specificity of the germ, whether the infection be primary or secondary, and upon the method of its entrance into the system, no definite information is yet available.

A Contribution to the Study of Typhoid Fever and its Bacillus. (Contribution a l'étude de la fièvre typhoïde et de son bacille.)

L. REMY. *Annales del Institut Pasteur*, Tome XIV, No. 8, August, 1900.

As an introduction to his article Remy calls attention to the fact that the only positive evidence of typhoid fever which can be obtained during

life is the presence of the typhoid bacillus in the stools. He points out that so far the methods having this end in view have been successful in only a moderate measure. Elsner's method, though the most successful, has given variable results, and this he thinks is due to the fact that potatoes, which form the basis of Elsner's medium, have a variable chemical composition. His paper consists in a study of stools in typhoid fever with a new medium, which is, to all intents and purposes, a potato medium, in which instead of using potatoes he uses a constant chemical equivalent. Without going into unnecessary details it may be said that by this method he was able to isolate the bacillus of typhoid fever from the stools of every one of twenty-three cases in which he made the examination. This isolation was not always made at the first attempt, but seldom more than two examinations were necessary. When a failure resulted from the examination it generally occurred when the examination was made at a very late stage of the disease. Bacilli were found as early as the third day, and as late as the forty-fifth day. They were most easily found and most numerous during the second week, when in one or two fatal cases they constituted the majority of the bacilli present in the stools. The author used the same method in examining the stools from twelve individuals with various diseases not of a typhoid character, and was never able to isolate the typhoid bacillus. He points out one fact which he thinks partly accounts for the failure of other observers, and, that is, that the typhoid bacillus is found practically exclusively in the depths of the medium, so that an observer who took nothing but surface colonies would be practically sure to miss it.

Concerning the Distribution of the Bacillus Tuberculosis and Pseudo-Tuberculosis in Milk. (Zur Kenntniss der Verbreitung des Bacillus tuberculosis and Pseudotuberculosis in der Milch)

E. KLEIN. *Centralblatt für Bakteriologie*, Band XXVIII, No. 4-5.

Klein reports the results of the examination of one hundred samples of milk with regard to the presence of the tubercle bacillus and the organism causing pseudo-tuberculosis in animals. The milk was collected into sterile flasks and sedimented in conical glasses, and the inoculation experiments were made with the sediment. Guinea pigs were the animals generally used, the injection being made both subcutaneously and intraperitoneally. Forty-two of the one hundred samples gave negative results. Seven out of the one hundred samples caused typical tuberculosis in both guinea pigs used for each sample. Eight of the one hundred showed typical pseudo-tuberculosis and eight of the animals died from an acute infection.

The author made some further experiments regarding the action of milk as a medium for the growth of the tubercle bacillus. He found that in some instances tubercle bacilli of a low degree of virulence when grown in milk regained their virulence to a considerable degree. He found the bacilli grew well in milk in the form of clumps in the depth of the medium.

ALBANY MEDICAL ANNALS

Original Communications

ECTOPIC PREGNANCY:

PRIMARY RUPTURE THE OPPORTUNE TIME FOR MAKING DIAGNOSIS.*

By GEORGE McNAUGHTON, M. D.,

Brooklyn, N. Y.

In this brief paper, the classification offered by Lawson Tait will be accepted, inasmuch as it is simple, practical and confirmatory of the writer's experience. You will remember that three varieties are mentioned: (1) Ovarian, (2) Tubal, (3) Tubo-ovarian. The first mentioned might be thrown out and dismissed with the Scotch verdict, "not proven," leaving only two to be seriously considered. That there are many modifications of the two remaining varieties is certainly true, but for the purposes of this paper they need not be referred to.

A personal experience covering seventy operated cases tends to confirm the view that this condition is as easily diagnosed as that of most diseases affecting the sexual organs of women, that it is a serious blunder to consider the diagnosis beyond the easy comprehension of the general practitioner, who is always the first to see these patients, and that the time is not far distant when a failure to recognize the meaning of the symptoms present will be cause for criticism.

The doctor will not often be called upon to make a diagnosis before the primary rupture, because, as a rule, the patient is unaware that there is anything out of the ordinary the matter. Frequently it has been stated by writers, that diagnosis before

*Read before the Medical Society of the State of New York, January 29, 1901.

rupture had never been made. It is therefore a satisfaction to state that in three of the seventy cases, a presumable diagnosis of tubal pregnancy was made, and a cœliotomy before rupture proved the presumption correct. The symptoms in these cases were the signs of early pregnancy, plus pain in one side; on physical examination a small, soft, fluctuating tumor was found occupying space near but distinct from the ovary. It is only fair to state that these patients were all thin women, with pelves and contents favorable for examination.

A growing tumor, occupying a circumscribed space, will certainly sooner or later reach the limit of the resisting tissues and a rupture will occur at the point of least resistance, or the foetus escape at the fimbriated end of the Fallopian tube. Presuming this tumor to be a fruit sac, its future depends upon its age at the time of rupture, and whether it be thrown into the free cavity of the peritoneum, or beneath the broad ligament. You are asked to bear in mind that it is the belief of the writer, that extra-uterine pregnancy always occurs primarily in the Fallopian tube; that the fruit sac may be extruded from the fimbriated extremity of the tube without causing rupture; that it may emerge from the tube, yet remain within the folds of the broad ligament. A modification of the former was seen last week when a rupture of the fruit sac occurred, and remained in the broad ligament; the hæmorrhage, which was very extensive, came through the fimbriated extremity of the Fallopian tube; there was no peritoneal rupture to be found. It is interesting to speculate what would have been the diagnosis had this hæmorrhage traversed the uterine end of the Fallopian tube and the blood been discharged through the vagina.

The numerous theories which have been advanced to explain the cause of tubal pregnancies only show that it is still a disputed and not easily settled question. Some physiological points will have to be determined before the pathological will be accepted. To the diagnostician, the cause is of little use, as he is confronted by a condition which requires prompt decision. Mistakes in diagnosis will be made, but in most instances these may be classed as justifiable, as in mistaking a small ovarian cyst with a twisted pedicle, complicating normal pregnancy. Normal pregnancy in a fibroid uterus may offer perplexing complications, as the fibroma in the early weeks increases in size, becomes softer and occupies a higher plane than before pregnancy occurred. The knowledge

of a pre-existing fibroid will aid materially in arriving at a correct conclusion; in the absence of this information, an examination under anæsthesia will enable the doctor to exclude tubal pregnancy.

An ovarian or dermoid cyst with a twisted pedicle will produce subjective symptoms very like those of ruptured tubal pregnancy.

A retroflexed pregnant uterus has been mistaken for an extra-uterine pregnancy; under favorable circumstances this condition may be excluded, favorable circumstances implying a proper history of the patient and a careful examination under ether.

In my experience, one of the most difficult conditions to distinguish from tubal pregnancy, is ovarian or tubo-ovarian abscess, in many cases of which the menstruation will have been disturbed,—absent, irregular or continuous. The patient will have had pain, sometimes very severe, and if rupture has occurred, the same physical conditions are present and essentially the same symptoms are produced. To carry the simile further, the same danger is present and similar treatment is indicated. There is this difference, however, which will assist in arriving at a correct conclusion: one is an inflammatory process accompanied more or less by symptoms of inflammation, and the other a physiological process merely displaced, usually without the signs of inflammation.

Acute appendicitis, particularly when complicating ruptured tubal pregnancy on the right side offers a problem in diagnosis which will baffle most clinicians. A case of this kind was seen last year. A relation of the history of this case will be interesting, and at the same time will serve perhaps a useful lesson in treatment. This patient assumed the matrimonial rôle immediately after a menstrual epoch, the flow failed to appear at the end of the usual interval, two weeks later she fell in syncope; her physician made a presumptive diagnosis of tubal pregnancy and remained in attendance for several days, the patient gradually improved until she was able to go about the house, but suffered some pain in the right side. A few days later there was a recurrence of pain, accompanied by vomiting and considerable abdominal distention. It was at this time that I saw her and there was no hesitation in pronouncing the case one of tubal pregnancy with secondary rupture. Laparotomy confirmed the diagnosis of

tubal pregnancy, but in addition she had acute appendicitis, from the symptoms of which she was suffering immediately prior to the operation; and in this instance it was the appendicitis that determined the propriety of an operation, although that fact was not recognized. It is important to note that the condition of the vermiform appendix would have been overlooked, had not especial search been made, and that portion of the viscera identified. Usually the tubal condition would have been considered sufficient to cause the symptoms which were present.

This experience emphasizes the necessity of regular inspection of this frequently diseased portion of the peritoneal contents when the opportunity offers.

The foregoing personally observed cases have been, in a general way, referred to, merely to call attention to the fact that in this, as in other pathological conditions, trouble will occasionally be encountered, but in no way is vitiated the stated proposition, that extra-uterine pregnancy is as easily diagnosed as most other pelvic diseases.

Consider for a moment the physical condition accompanying a tubal pregnancy: the presence of an impregnated ovum in a Fallopian tube, constantly increasing in size and contained within a limited space, which means rupture sooner or later; this limit is reached in the vast majority of cases about six weeks after conception has taken place. It is doubtful if a Fallopian tube will ever allow a two months' development of the ovum without rupture. The tube as well as the surrounding parts are peculiarly friable, as are the genital tissues in normal pregnancy. This explains why a primary rupture always takes place.

The foregoing description suggests the symptoms likely to be present. In the first place the menstrual flow fails to appear at the expected time. In order to elicit this fact it is necessary to ascertain the normal menstrual habit of the patient, and to do this satisfactorily, several months must be considered. Normal pregnancy is not easily determined at so early a period, but absence of the menstrual flow is usually but one symptom in the chain, but a very suggestive one.

During the development of the impregnated ovum in the tube the patient may suffer more or less pain in the affected side; in most cases it is described as a sense of discomfort, while in a few it is sufficient to cause the patient to seek relief. Under such cir-

cumstances in a favorable subject a presumptive diagnosis of extra-uterine pregnancy may be made. Within the succeeding three weeks, in a large proportion and perhaps in all, the primary rupture occurs. It was at this time in all my cases that the suffering was so great that the services of a physician were required. I cannot recall a single exception. Cases have been reported where the fruit sac and contents have developed so gradually that there were no disagreeable symptoms present to indicate what had been taking place, but according to my experience this must be rare. Simultaneously with the rupture there are severe pain and usually a flow of blood from the uterus. At this time the patient, and often the doctor as well, think an early abortion is the cause of the symptoms. It would seem that this is the opportune time for making a diagnosis. A careful inquiry into the menstrual history will elicit sufficient evidence to make one suspect pregnancy; that, coupled with pelvic discomfort and followed by sudden severe abdominal and pelvic pain, accompanied by uterine flow and symptoms of shock out of proportion to the amount of blood lost *per vaginam*, presents a characteristic picture of primary rupture of tubal pregnancy, which, once seen is not easily forgotten; and it is at this time that the practitioner should think of the occurrence of ectopic pregnancy. With the mentioned sequence of manifestations plus physical signs indicating the enlargement of one or both Fallopian tubes, for a hæmorrhage may take place in the unaffected tube, and exquisite tenderness over one or both sides of the uterus the surgeon need have little hesitation in recommending an intra-peritoneal exploration.

Should the rupture occur beneath, or within the folds of the broad ligament, a tumor will be felt behind the uterus, which will raise that organ to a position quite close to the symphysis pubis.

It may be remembered that a ruptured intra-ligamentous cyst may produce the same physical signs; indeed any distention of the broad ligament, whether it be fibroid, pus or blood, will displace the uterus upwards. A subligamentous hæmorrhage does not require immediate treatment; not so, however, the intra-peritoneal variety, in which situation there is nothing to restrain the flow of blood, and this large cavity is capable of holding sufficient to cause death. The best thing that a woman can do under these circumstances is to faint, for the blood will probably cease to flow, at least for the time.

Fortunately the loss of blood has a remarkable effect upon the arterial pressure, else most of the cases would die before the surgeon could tie the bleeding vessel. The patient should not be given stimulants. Drugs that will decrease both the force and the number of the heart beats are indicated. Aconite or veratrum viride would be a more reasonable treatment. I advise the use of ergot and morphine. The heart should not be whipped up until the open blood vessels have been secured by ligatures; even then, that the heart may act properly I would first try to restore fluid by means of normal saline solution, introduced directly or indirectly into circulation; in desperate cases the direct method is preferred, care being taken not to introduce too much; a force pump will be seriously hampered if called upon to propel too much or too little. Excuse this digression.

This paper is so discursive that I shall ask the privilege of recapitulation, which will serve to emphasize the points I have tried to make:

(1) that extra-uterine or ectopic pregnancy is not a rare accident;

(2) that impregnation takes place primarily in the Fallopian tube;

(3) that rupture takes place in most, perhaps all, cases before the eighth week;

(4) that a presumptive diagnosis is not difficult.

LACK OF UNIFORMITY IN PRESCRIBING MYOPIC GLASSES.*

By S. BUSBY ALLEN, M. D.

Clinical Assistant, New York Eye and Ear Infirmary; formerly Assistant Surgeon, Manhattan Eye and Ear Hospital.

The lack of uniformity in the prescribing of myopic glasses is due to the difference of doctrine or perhaps in some cases to the absence of any doctrine held by the prescriber as to the treatment of near vision. We judge from cases presenting themselves at the clinic and in private practice, cases that come in complaining of asthenopia and wearing glasses so varied that they would seem to show that prescribers may be divided into three classes:

*Read before the New York County Medical Association, February 18, 1901.

those who without reference to the degree of myopia present, whether it be high myopia or low myopia, fit their patients with glasses for distant vision and dismiss them without any consideration of near vision; these prescribers suffer evidently from a lack of doctrine and we might say of conscience as well. At the opposite extreme is the prescriber who, having patients of two or three dioptries, always gives two pairs of glasses. Between these two comes the man who seems to make a compromise by giving them lenses representing about one-half their total error and letting them use these glasses for both near and distant vision, and this without reference to their range of accommodation or the degree of myopia present. The profession would seem to vibrate somewhere between these three points.

I find it hard to pin a man down to any settled doctrine. Men will wander off to discuss the personal equation of the patient, the character of his work, the range of accommodation, the strength of the external rectus, changes in the cornea, lens, vitreous, retina, chorioid, nerve, etc.—it is very baffling. But dismissing all these matters, or rather we will say, including all these matters, there should be a more definite and uniform doctrine.

There is a notable difference between the teaching of the French and English schools and it must be owned the question is not settled. Let two men equally competent examine a number of cases of hypermetropia, hypermetropic astigmatism and compound hypermetropic astigmatism. Being equally competent, their finding would be similar and so would their prescription. They might differ in some unimportant details, as for instance, the amount of latent hypermetropia they would correct, but in the main there would be uniformity. Let the same men examine a number of cases of myopia, myopic astigmatism, and compound myopic astigmatism, their finding will be, as before, similar, but there will be a notable difference in their prescription. The lack of uniformity will be at once manifest: It is evident one must be more nearly right than the other.

But the necessity for correct prescribing in myopia is far and away more important than in hypermetropia. Improper lenses in hypermetropia will cause considerable tumult, asthenopia, etc., but in myopia such lenses may lead to, or serve to hasten, grave and irremediable consequences. The myope appeals to our sympathies, not only on account of the dangers of progressive myopia,

but also because of the probability of arresting or retarding its further progress. How graphically Dr. Oliver has drawn the picture of the mental evolution of neglected or improperly treated myopia! "The myope, unable by reason of deficient distant vision to compete in out-of-door sports, and jeered at by his companions for his failure, is early made to retire to the more pleasant task of near work. Applying himself without any correction for mental discipline, and physical welfare, he lapses into desultory and miscellaneous reading, performed as a rule under the worst of circumstances. Unwisely applauded for his constant studies, he pursues his evil habits, which become increasingly fixed, until at last he becomes introspective and perverted in his tastes. The changing beauties of nature are unknown to him, and the varying facial changes, and peculiarities of physical expression, which represent the mental attitudes of those whom he meets, are as nothing. As a result self-consciousness, with the disturbing effect of repeatedly disappointed ideals, all too soon become a part of his mental attribute. Uncongenial to his fellows, superior to them in his knowledge, and thus causing jealousy and its fellow, envy, timid to assert even known truths, and brusque and rude in order to hide a half-concealed fear of every new face, he finally leaves all manner of friendship, and, in spite of well-meaning opposition, seeks the worst he can do—constant use of his eyes—to help fill his already overburdened and badly trained mind and sinks into sedentary life. Seldom practical, always in search of the metaphysical, and ever plodding but rarely applying himself, his mental vigor becomes so warped as to demand constant application. In fact there is but little true intellectuality in his make up; his mentality is often a mere precocity with physical deterioration set at a premium. Such a subject fitted only for a life's work in some mental groove, that has but few congenial spirits in it, and one that is ever demanding book study, unfortunately will, unless the refractive equivalent be rendered stationary by proper correction, hygiene, exercise, etc., suddenly find himself rendered unfit for continuation of his work by reason of a catastrophe to the eye balls themselves: the deplorable result of many such lives.

This is no mere fancy picture, nor is an isolated case here and there. To the hospital surgeon and the educator these cases are as familiar as they are pitiable. To prevent such a calamity from overtaking a youth should stimulate us to the most correct think-

ing and most energetic acting. Of course there are exceptions; we can all recall amongst our acquaintance, myopes of high degree who have surmounted all obstacles and have achieved a success that is all the more to their credit. The amount of service we can render these patients, depends upon getting at the causes and the efficiency of the remedies we prescribe. When organs of the digestive, circulatory, or excretory system, are overworked or made to do work for which they are not fitted, we have irritation, congestion, functional derangement and ultimately organic disease. The function of the eyes is to give clear binocular vision at all distances at which the object can be brought within range. For this the eye must be emmetropic, the intraocular and extraocular muscles well developed and equally balanced. This is of course an ideal condition. We conceive of the myopic eye starting with some one or more of these many factors removed more or less from the ideal. Add to this constant use of the eye for near work with perhaps insufficient and improper illumination, strains of convergence and accommodation, together with faulty hygiene, and we have sufficient sources of irritation to pass an eye along from emmetropia or myopia, and along to increased antero-posterior diameter, flattening of the cornea, formation of crescent, posterior staphyloma, stretching of the chorioid and retina, secondary changes at the yellow spot, impaired nutrition of the lens, with opacities at the posterior pole, disorganization of the vitreous, with floating opacities and scotomata, chorioidal patches, and finally detachment of the retina, with attendant asthenopia, exophoria, and diplopia; with impairment or loss of vision. While a study of the relative amplitudes of accommodation and convergence demonstrates that the two functions may be exercised independently of each other, thus we may have a gradual lessening and even complete disappearance of the range of accommodation, while that for convergence remains, still we know that though they are independent, and never constant, they nevertheless work very intimately together and are innervated from centers very proximate. For instance, in an emmetrope, if one eye be covered and the other caused to converge, the covered eye will converge in unison; and so in hypermetropia, the augmentation of one function facilitates the action of the other. We may say an effort at accommodation will provoke an effort at convergence, at any rate we say that where both eyes are used and do not differ in refrac-

tion more than a dioptré or a dioptré and a half we can hardly conceive of an unwonted effort of accommodation without associated efforts at convergence.

Take a myope of over four dioptrés who has been fitted only with distant glasses for near work, what takes place? Here the distance glasses focus the rays on or close to the retina; when the object is approached nearer, the rays are focussed back of the retina and the accommodation is called upon to bring them forward. If the near object had been looked at without glasses the accommodation would have been called upon but slightly, the difference in the amount of range in each instance depending upon the strength of the glasses.

The glasses also act to diminish the size of the image, causing the wearer to bring it nearer the eye in order to get a large retinal image. Although this increases the amount of convergence, the total amount of convergence is less than it would be if the object were viewed without the aid of glasses, because the object would then be at the conjugate focus of the eye. Here would seem to be the point at which there is the greatest laxity or variance amongst prescribers. Whilst all agree that strain at convergence is the principal fault, not all agree as to the part played by accommodation. Some authors deny that accommodation has any part in the production of myopia. It is evident, however, that the rays being focussed on the retina, before the accommodation acts, there must be a previous act of convergence.

Assuming then, that strain at convergence and accommodation is the principal cause of myopia and that the best treatment is neutralizing the strain as far as possible by means of lenses and remembering the intimate relation and inter-dependence between them, the necessity becomes apparent, not merely to prevent excessive convergence, but excessive accommodation as well.

In hypermetropia nature has provided a means in accommodation for neutralizing the refractive error; in myopia, however, the accommodation can only be used when there is a previous and excessive effort at convergence, and to prevent this very effort should be one of the objects of the prescriber.

The prescribing of distance glasses is evidently of secondary importance, for here there is no excessive use of the convergence. They should be given slightly under the full correction in order to prevent the necessity for use of the accommodation.

For near work, glasses of such strength should be used as will place the conjugate focus at the point where most of the patient's work is done. For ordinary work, reading, writing and sewing, this will be twenty-five centimetres. The myope of three dioptries will therefore not require glasses for near work. When there is a variance of more than a dioptry from this, necessity for especial glasses for near work begins, and the greater the variance the greater necessity for such glasses, even if there be a good range of accommodation.

THE EARLY RECOGNITION OF MALIGNANT GROWTHS.*

By EDGAR A. VANDER VEER, M. D.,

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While this has long been recognized by the medical profession, yet it is a proper subject for careful consideration, in view of the recent rapid strides in medical and surgical science. So long ago as 1882 the late Dr. Samuel D. Gross, of Philadelphia, presented a paper before the American Surgical Association, in which he advocated the removal of all malignant growths immediately upon their diagnosis. This paper created a great deal of discussion at the time, and the consensus of opinion favored the views he advocated. There were some who did not agree with him, but mainly on the question of diagnosis, and not on the expediency of an early operation. Since then the strides in aseptic surgery have been so great that what was dangerous then is comparatively safe now, and allows us to advocate operations which in former times would necessarily be fatal. Since Gross' time various papers have been presented on the subject, but none which attracted so much attention as that did.

New York State has appropriated a handsome sum for several years past for the investigation of cancer, under the direction of Dr. Roswell Park, of Buffalo, but as yet no report has been made throwing any light upon the subject. About a year ago Harvard University received a bequest from the late Caroline Brewer Croft, the income of which was to be devoted to the undertaking of a systematic investigation into the origin of cancer. This investigation has been conducted by the surgical

*Read before the annual meeting of the Fulton County Medical Society, January 10, 1901.

department of the medical school, and their first annual report, which has just been published, makes very interesting reading. From the study of statistics they draw the following conclusions in regard to the increase of cancer, the statistics having been carefully analyzed in various ways:

First, the death rate based upon the total number of deaths and the total population has been made.

Second, the rate for each age period (decade) above thirty has been made. Below that age there are probably very few cases of cancer.

Third, the ratio of death from cancer to the total number of deaths above thirty, and for each age period, also the deaths other than from acute, infectious diseases. In whatever way the subject was studied there was found a marked increase in the death rate from this disease.

The analysis of the internal forms of cancer, as far as they go, does not show any greater rate of increase than the external forms. This would tend to disprove the theory that the rate of increase is due entirely to better diagnosis, and, furthermore, it would seem that better diagnosis would have eliminated various syphilitic and tuberculous processes which formerly might have been termed as cancer.

Osler in his recent work on cancer of the stomach makes a few remarks on the increase of cancer in general in which he says, "If figures can be trusted, the death rate from cancer has greatly increased in all countries in which careful returns are made." Bryant, in his recent work, concludes that the death rate from malignant disease is constantly increasing. Roger Williams estimates that the proportion of cancer mortality is more than four times greater than it was fifty years ago. The census figures for the United States for the past five decades are as follows:

Year	Deaths from Cancer	Cancer deaths per 1,000 deaths
1850.....	2,088	6.5
1860.....	3,672	9.3
1870.....	6,224	12.6
1880.....	13,068	17.2
1890.....	18,536	21.1

The report of the Registrar General for England and Wales makes the following statement: "In 1865 the deaths

per 100,000 living were 36.78; in 1897, 78.7." These figures show a constant increase during a period in which the death rate from all causes has steadily fallen. The total death rate was in 1861-'65 per 1,000 living, 22.58; and in 1891-'95 was 18.73. The intervening periods show a steady decrease. In the same report for 1889, in discussing this question of increase, it is pointed out that the death rate from cancer has risen more rapidly in males than in females, and that the increase has been greater and greater the more advanced the age. In 1851-'60 the death rate per 100,000 living was 19.5 for males and 43.4 for females; while in 1871-'80 the rate was 31.5 for males and 62.2 for females. The increase was nearly general in all the organs affected. In the search for an explanation greater accuracy in diagnosis is not considered adequate to account for the increase, but King and Newsholme, in an article "On the Alleged Increase of Cancer," consider that the apparent increase is largely due to more accurate diagnosis. They endeavor to prove that the increase is only in cancer of the organs which are inaccessible. The rate in the sexual organs, in which the disease is easy to diagnose, they consider to have remained the same. They claim that the statistics of Frankfort-on-the-Main, where records are kept as to the organs affected, (from 1860-'91), show an absence of any increase in cancer of these parts. W. Roger Williams combats this view strongly, and sums up his conclusions in the following words: "The uniformity in the variations of the increments of increase in a long accession of years; the fact that the increase has not been confined to one or a few parts of the body, but has involved them all, on the whole, without any considerable disturbance of a normal proportionate ratio; the fact that the increase has been diffused over the whole country, instead of being limited to certain districts; and the fact that similar increase has taken place in most civilized communities where statistical records have been kept; these considerations, together with other facts, point conclusively to the reality of the increase of cancer." Welch points out that the increase may be due to the decreased mortality in infants, and the prolongation of life by improved sanitary conditions. He also quotes the statement of Dunn that the cancer rate of the country may be taken as an index of its healthfulness. Payne combats the idea that the increase of cancer is only apparent, and holds that the explana-

tion of improved diagnosis of cancer in the inaccessible organs does not account for it.

We hear much about the prophylactic treatment of disease, but here, where prophylaxis and early recognition should be employed, we seldom see it mentioned, that is the field of preventive medicine needs yet to be developed in this direction, so far as the early application of remedies applied to the treatment and arrest of malignant conditions is concerned. Malignant disease is not without the sphere of prevention. Let me illustrate, particularly in the cases of gall-bladder irritation, from gall stones, or otherwise. It is now a well established fact that pain, traumatism, inflammations and adhesions, from repeated attacks of biliary colic, develop carcinoma somewhere along the line of the tissues implicated, and that in nearly eighty per cent of long-continued attacks, in which an operation is finally done, malignancy is discovered, in connection with the condition of gall stones. Another very marked characteristic condition is that of lacerations and injuries of the cervix. We have sometimes been surprised, and in former years it was thought exceedingly rare, for a young married woman to present a case of cancer of the uterus. The fact is, from the standpoint of etiology and pathology, at the present time, that the lacerated cervix, neglected, not attended to as it should have been, is not an infrequent cause of the epithelioma or form of cancer from which she is suffering. How many, many cases we see of neglected moles or growths about the surface of the body that result in true skin cancer from repeated irritation, and when not treated properly become a source of glandular infiltration, involving the more serious structures, through the lymphatic system, and at last we have all the marked conditions of serious constitutional malignancy, when at one time it was strictly local, and required but prompt, preventive treatment to arrest its future development. Especially should we be cautious in the care of long-neglected ulcers, such as result from gunshot wounds, and similar traumatism. Here we have conditions that are sometimes quite entirely overlooked, and the hand, foot, or upper or lower extremity is sacrificed because of the belief that the original lesion was non-malignant and would yield to ordinary treatment.

We continue to delude ourselves, and when too late find that the growth which was so benign, and which was yielding so nicely

to treatment, has grown by leaps and bounds, and is far beyond any chance of relief. We too often "lock the stable door after the horse has been stolen."

It seems to me that the great reasons for the early recognition of malignant growths may be stated thus:

1. The patient not having been debilitated by a long and tedious strain upon the system, can the better withstand the risk of shock and hemorrhage of an operation.

2. The greater the probability of a complete removal of the malignant growth, by an early operation, and so the less liability of its return.

3. The growth being small the incision will correspond, and so the avoidance of unsightly scars.

It is by no means an easy task to recognize a malignant growth in its early stages, but if we go upon the assumption that all growths are malignant until proven otherwise we will seldom miss our diagnosis. Benign tumors have a tendency to turn into malignancy upon injury, etc., owing to an impoverished state of the system, and it is well in all growths, where we have the history of an injury, to be suspicious that we have a malignant growth to deal with. All benign growths of rapid development cannot be extirpated too soon. Then again the history of malignant growth in the family should make us consider carefully in regard to the case which we are called upon to examine. It is an old saying that "a stitch in time saves nine," and nowhere is this better illustrated than in the subject under consideration.

As I have stated, the early recognition of malignancy is nowhere more important than in growths of the female breasts, or genital organs. They are, in their functions, so much more active than in the male, and are so much more prone to disease, that we are often inclined to overlook the patient's complaint in regard to one of these parts, and to dismiss as trivial a growth that is, in reality, the beginning of malignancy. It has been the custom in the Albany Hospital, for the last few years, when a case of disease of the uterus presents, to carefully curette, save the scrapings, and send them to the laboratory for examination. Upon the report from the laboratory the subsequent treatment of the case, in a measure, depends. Very frequently the report comes back malignant, and the case, that from all macroscopical appearances was a simple endometritis turns out to be a carci-

noma uteri. The curettage has done the patient no harm, we have been enabled to arrive at a correct diagnosis, and the chances of saving her life are vastly increased. The case is operated upon at once, and in this way a carcinoma, which is still confined within the walls of the uterus, is removed, with the chances that the whole growth has been extirpated, and that there will be no return of the trouble.

Who can deny that this procedure is far better than to let the case run along, with local treatments, with conditions growing worse, the patient becoming weaker, and to discover later the fact that the patient has a malignant growth, the golden opportunity for operating, when it was small, with no complications, and she was in good condition, having passed. Certainly all of us here to-day wish to do our full duty to our patients, and we surely have not done so until we have employed every means possible to diagnose their case.

In tumors of the breast the condition is somewhat different, for here we have the growth directly under our observation, and so, easy of diagnosis. We do not have to depend upon external aids, outside of our own senses, and I suppose a malignant growth of the breast is more quickly recognized than in any other part of the body. In fact, most patients ever have that in mind when they first come to your office. They have noticed a small growth in the breast, and immediately think of cancer, as a friend, Mrs. A. and Mrs. B. who were known to have a cancer of the breast, started in just the same way, and to this patient the cases are exactly the same. Now to do this patient full justice a careful study of her condition, symptoms, and history demands your keenest surgical diagnostic skill. Warren, in his "Surgical Pathology," says that "A lump in the breast of a woman between forty and fifty years of age indicates cancer in eighty per cent of the cases. Dr. J. Collins Warren, in the *Boston Medical and Surgical Journal*, for April 11th, 1889, describes an instrument for the early diagnosis of tumors of the breast which ought to have more general use. The instrument consists of a fine canula sharpened on the inner edge, which, when rotated by means of a handle at its upper end, acts like a trephine to remove a minute circular disc of skin. The diameter of the canula is about four millimeters, a size sufficiently large to make a section of ample dimension for microscopic study, even from a transverse section

of the fragment removed. A small staff is kept within the canula to protect the cutting edge, when not in use, and to remove the specimen from the canula. The method of making an examination with this instrument is so simple that it can easily be carried out in one's office. A few drops of the four per cent solution of cocaine are injected subcutaneously over the nodule to be examined. The skin having been thoroughly aseptized, is punctured with a sharp-pointed bistoury, making a minute wound, sufficiently large to introduce the exploring canula. The instrument is then introduced against the new growth, and with as little pressure as possible lightly rotated between the thumb and little finger. After the canula has been introduced about two inches it is withdrawn an eighth of an inch and then directed in a line slightly oblique to the original direction. By slight rotation the tissue within the canula can be detached from the diseased mass and the instrument withdrawn. The tissue pressed out from the canula can be placed in weak alcohol and sent to the laboratory for examination.

By careful manipulation portions of the tumor from the extreme periphery to the central portion can be obtained, so that there is no danger of obtaining a false impression, owing to a partial examination only of the growth. Dr. A. Vander Veer made use of a somewhat similar instrument a few years since, but it was before the use of cocaine, and causing the patient, as it did, quite a good deal of pain, fell into disuse.

There is one point, however, to which I think the general practitioner does not pay enough attention, and that is in regard to a previous injury. In eliciting a history of the case he is very apt to overlook the fact that at some previous time the patient has received an injury, or has had an abscess from which a tumor springs later, and the growth is very likely to be malignant. In fact, statistics prove that about twenty-five per cent of all malignant tumors in the female breast arise from a previous traumatism. With the improved methods of operating in these days we can cure or prolong a patient's life years by an early diagnosis and prompt removal of carcinoma of the breast.

Even in children we should be on our guard in thinking of the possibility of malignancy, when they are presented to us for the diagnosis of an obscure disease or growth.

For instance, sarcoma of the kidney, though comparatively rare

in children, is yet to be thought of. The child is presented to the physician with the history of a rapidly growing tumor in the right or left iliac region, progressive emaciation, and all the symptoms of a malignant growth. Palpation of the tumor reveals a hard mass, not very movable, and leaving us in doubt as to whether it is extra-peritoneal or intra-peritoneal. From an exploratory incision we find a soft, cheesy-like material, extra-peritoneal, but pushing the intestines over to one side or the other. Upon cleaning out this mass we discover it springing from the kidney, and fortunate, indeed, is it if the adjacent structures are not also involved.

Again, a male child is presented, and we notice a tumor more in the median line than in the former case, and probably not so large, but of a firmer consistency, and not so easily movable. Upon examination of the scrotum we find the testicle on that side missing, and immediately diagnose undescended testicle. If now we allow this testicle to remain in the inguinal canal, without removing it, the chances are that before the boy reaches twenty years of age he will have a sarcoma of that testicle developing which will eventually end his life.

Again, it is the girl instead of the boy who is presented, and here we must be even more on our guard than in the former case, for we have no external landmark to guide us in making a diagnosis. Recent investigations have proved that sarcoma of the broad and round ligaments can and does arise in females of all ages.

In all three cases the history of previous injury should be given most careful consideration, and put us on our guard at once as to the nature of the growth.

In conclusion I wish to say a few words in favor of the value of an exploratory incision in clearing up our diagnosis in an obscure case. We are not just sure what the growth is, whether benign, or malignant. If benign, well and good; if malignant, it must be removed. The incision is made and the diagnosis is cleared up without any harm to the patient, and very often to his lasting good. This is particularly true in regard to tumors of the abdomen. Up to within a few years ago any growths in or about the abdomen were thought to be necessarily fatal. Now, thanks to asepsis, we can thoroughly explore the abdominal cavity, and remove such growths as we think necessary. In this

way malignant growths of the stomach, pancreas, liver, spleen, intestines, etc., can be easily diagnosed and removed, and the patient's life saved; whereas, only a few years ago he would have died a lingering death.

While opening an abdomen is always dangerous, still where it will confirm the diagnosis, it ought to be done.

Correspondence

APPLIED HYDROTHERAPY

DAO, PANAY, P. I., *January 15, 1901.*

TO THE ANNALS:

The native Philippino is a liar by birth. Whether he is saying that he has not seen insurrectos or simply telling his name it's all the same. It isn't so. On his knees he will invoke the Blessed Virgin and all the Saints to bear witness that he is a "buen amigo" and that he never had a gun in his shack. Yet the gun is there. He can discriminate between truth and falsehood because he always elects the latter. Except sometimes. There are two times that he tells the truth. One is when he wants revenge. The other is when he takes the water cure.

Hydrotherapy as practiced in the Philippines was introduced by the native Tagalog scouts. Early in the campaign it became necessary to issue an order that all arms and private weapons be turned in to the military authorities. The reports of isolated American soldiers being picked off by mysterious shots from the rice fields got too monotonous. When the guard turned out to hunt for the shooter they found only a few hardworking hombres peacefully planting palay.

"They hadn't heard a gun go off. Had not seen an American soldier. And were muchos amigos." So the scouts were sent out.

They are liars themselves so they know the value of a nigger's "no." After the hombre has crossed himself and denied that he ever saw a gun they tell him that they have called to persuade him to "'fess up." Confess up is the English of it. To the native it means: "You have a gun hidden around here somewhere and you have either got to tell where it is or drown yourself with drink."

Then they tie his arms behind him and throw him upon his back. A knee on each side of his head keeps his face up. One of the scouts puts the end of a bamboo tube about an inch and a half in diameter into the patient's mouth. The tube is three feet long. It holds about three quarts. One of the scouts holds it perpendicular while another fills it with water.

The patient takes the first mouthful into his trachea. This is distressing so he swallows the rest. Rather a copious drink. When the tube is empty one of the scouts sits on the patient's stomach. He spouts like a whale. Then he is given an opportunity to "'fess up."

Sometimes a second treatment is necessary. More often though the hombre remembers where the gun is after one sitting. Hydrotherapy has another cure to its credit. The treatment, though uncomfortable, is really painless, it never does any harm and ninety-nine times out of a hundred effects a complete cure.

JOSEPH ALAN O'NEILL,

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Editorial

The Relative Safety of Anæsthetics

One of the most important communications on the relative safety of anæsthetics has just been made by the anæsthetic committee of the British Medical Association. This report deals with 25,920 cases of anæsthesia which were carefully recorded and strictly scrutinized. The cases are divided into uncomplicated and complicated, and the latter into cases of anxiety, of danger or of death. Although a large variety of distinct anæsthetics or mixtures was employed, still the fact that more than four-fifths of the cases were anæsthetized either by chloroform or ether makes this investigation practically a consideration of the relative safety of chloroform and ether. In cases which gave anxiety, there were one-sixth more under the administration of chloroform than of ether, while of those which seemed dangerous there were five times as many with chloroform as with ether. The ratio of deaths was practically the same. Of the deaths following chloroform, however, more than one-third were due entirely or principally to the anæsthetic, while of the ether deaths not one was

considered to be entirely due to the anæsthetic. The fact is pointed out that ether was often selected for use in conditions of exhaustion and collapse, and the mortality rate for this anæsthetic was thus affected.

Vomiting was most frequent after ether, less after chloroform. In cases of prolonged vomiting, however, the order was reversed. Shock or collapse and bronchitis were more common after chloroform than after ether. Respiratory phenomena—dyspnœa, spasm of the glottis—were more frequent under ether, while circulatory disturbances were more common under chloroform, and those of a grave character occurred five times as often. The dangerous or fatal symptoms occurred as a rule in the early stages of anæsthesia, while prolonged anæsthesia induced the minor complications, rarely the fatal. The danger rate began to increase after the thirtieth year under chloroform, but with ether it remained constant until after the fiftieth year. Apparently none of the mixtures of ether or chloroform give such satisfactory results as ether alone. Nitrous oxide with or without oxygen showed the lowest percentage of complications. Their final conclusion is that the most important factor is the skill of the anæsthetist and that to insure the best results he must be one of large experience and good judgment.

This report, coming as it does from a committee of physicians of the highest professional standing who have carefully scrutinized and weighed the conditions in every case, is the strongest possible endorsement of ether as an anæsthetic. This is especially true when it is remembered that the use of chloroform as an anæsthetic was discovered in Edinburgh and that it has always been the preferred anæsthetic in Great Britain.

Operation for Perforation in Typhoid Fever The almost invariably fatal result of perforation has directed many attempts to abdominal section for relief, but the results have been discouraging, and the recoveries very few. A gratifying exception to this has been the experience at the Johns Hopkins Hospital, as revealed in a paper by Dr. Osler, entitled "A Plea for the More Careful Study of the Symptoms of Perforation in Typhoid Fever with a View to Early Operation," and published in *The Lancet* of February 9, 1901.

Dr. Osler urges that early operation may save from thirty to

forty per cent. of the cases. Fifty per cent. of the deaths in typhoid are due to asthenia, twenty-five per cent. to hæmorrhage and other accidents, and twenty-five per cent. to perforation. In his wards at the Johns Hopkins Hospital, eleven cases have been operated upon to January 1, 1900, with five recoveries, a percentage of forty-five. His plea is that a careful examination of the symptoms should be made in order that the occurrence of perforation be known at once, and operation performed within twelve hours, and before general peritonitis has become established. The nurse in charge of the patient should have specific instructions to report the first signs of hiccough, abdominal pain, vomiting, sudden rise in pulse or respiration, unusual sweating or indications of collapse. The physician should bear in mind that perforation is an accident liable to occur in the severe cases, in those with delirium, with diarrhœa, or with hæmorrhage, and in those with abdominal symptoms. Dr. Osler discusses in detail these symptoms, referring particularly to the characteristics of (1) the pain, (2) the state of the abdomen, (3) the general condition of the patient, and (4) the blood count. He concludes: Sudden pain, increasing in intensity, and recurring in paroxysms, is perhaps the most constant symptom of perforation. With an increase in the pulse rate, distension of the abdomen, increasing pain on pressure, and a rise in the leucocytes, the diagnosis is rendered probable. A surgical colleague should be called early, so as to share the responsibility of the case. In a doubtful case the patient should be given the benefit of the doubt and operation should be urged. A general anæsthetic may not be needed. In many cases cocaine has been used, with the help, sometimes, of a whiff of chloroform. One of Dr. Osler's cases recovered after three operations in two weeks, two for perforations and one in which perforation was suspected.

State Medicine

Edited by Harry Seymour Pearse, M. D.

IMPORTANT MEDICAL BILLS IN THE NEW YORK LEGISLATURE

Assembly Bill No. 1748. Introduced by Mr. Henry. An Act:

“To procure proper sanitary conditions and proper ventilation in public buildings and schoolhouses.”

Every public building and every schoolhouse shall be kept in

a cleanly state and free from effluvia arising from any drain, privy, or other nuisance, and shall be provided with a sufficient number of proper water-closets, earth-closets or privies for the reasonable use of persons admitted to such building or attending such schoolhouse. Said buildings shall be ventilated in such a manner that the quantity of foul or vitiated air exhausted shall not be less than fifteen cubic feet per minute for each person. The local board of health of each city, village, town or county shall, within six months after the passage of this act inspect each building of this character within its jurisdiction. It shall determine also, the air capacity and rapidity of removal according to the provisions of this act. Such inspection shall also be made upon the request of any interested person, provided that the building in question has not been inspected within six months. When the sanitary provisions are insufficient to conform with this act, the board of health shall issue a written order to the proper authorities, directing such changes as are necessary. Neglect to conform to this order within six months shall be punishable by a fine of \$100 and the board of health issuing the order can close a public building or schoolhouse if such order is not complied with within one month. The expression "public building" used in this act shall include any public building or premises used as a place of entertainment, instruction, resort, or assemblage. The expression "schoolhouse" shall mean any public building or premises in which instruction is afforded to not less than ten pupils at a time.

Assembly Bill No. 1731. Introduced by Mr. Kelly. An Act: "To amend chapter 431 of the laws of 1849, entitled 'An act to incorporate the Albany Hospital.'"

The board of governors of the Albany Hospital shall have power to provide in their by-laws the number required to constitute a quorum for the transaction of all business; but for the sale or alienation of any of the real or personal estate of the corporation, or the leasing of any of the real estate thereof for a longer period than one year, or for the suspending or discharging of any member of the medical staff, the consent of a majority of all the elected members of the said board shall be necessary.

Assembly Bill No. 1628. Introduced by Mr. R. Gardiner. An Act: "To amend chapter 770 of the laws of 1895, entitled 'An act to provide for a permanent establishment for the cure and prevention of hydrophobia, relative to the payment for services.'"

Overseers of the poor or other officers having charge of the dispensation of public charity in the several counties of this state may hereafter send to the Pasteur Institute in the city of New York all persons duly certified by regular physicians, who have been bitten by rabid animals or otherwise put in danger of infection with rabies. The charges for the services of said Pasteur Institute shall be paid as is provided for the several poor persons by the laws of 1896.

Assembly Bill No. 1630. Introduced by Mr. Henry. An Act: "To provide for a hospital for the special treatment of acute mental and nervous diseases within the city and county of New York."

This bill provides for the establishment of a hospital, in the city of New York, to be known as the Hospital for the Treatment of Acute Nervous and Mental Diseases. Such hospital shall be under the control and management of a board of twelve managers, six of whom shall be regularly licensed practicing physicians and six of whom shall be citizens of the city and county of New York, with stated terms of office and who shall serve without compensation. The said six physician managers shall serve as consulting physicians and surgeons to the hospital. To become eligible to appointment, they shall have been actively engaged in the practice of their profession for at least six years, they shall be residents of the city of New York actively engaged in the practice of medicine in that city for not less than two years prior to such appointment. The board of managers shall appoint a superintendent whose salary shall not exceed \$10,000 a year and who shall be a physician of good standing, of more than six years' experience in the active practice of his profession and who is recognized as a specialist in neurology and psychiatry; a secretary, who shall be one of the managers of such hospital and not a physician, his salary to be named by the board of managers; a treasurer, who shall also be a manager and not a physician and whose salary shall be \$5,000 a year; he shall be required to fur-

nish a surety bond approved by the mayor. All persons suffering from acute nervous and mental disease, who are residents of the city of New York, may be received at such hospital before final commitment to a state hospital or other institution according to law, and detained therein for a term of not more than ten days. The magistrates or other authorities of the city of New York may commit to such hospital all persons who appear to be nervously or mentally deranged until such time as their normal condition may be ascertained. All cases of alcoholism, narcomania, or habit neurosis may be committed, to be confined and treated for not longer than ten days, unless it appears to the satisfaction of the superintendent that the condition of the patient is such that an extension of such time is necessary for the health and treatment of the patient and the safety of the community; in which case, upon the affidavit of the superintendent, an order of a judge of a court of record may be granted, extending such time for a period of thirty days. A person who has been legally declared insane may be committed to such hospital for the purpose of treatment and more minute examination for a period not longer than thirty days. Convalescent insane may be transferred to such hospital from state hospitals and other institutions for the insane, for the purpose of further treatment and surveillance. The board of estimate and apportionment of the city of New York is directed to appropriate annually a sum not exceeding \$250,000 for the maintenance of such hospital. Said hospital shall be constructed at a place within the city of New York to be selected by the board of managers and approved by the mayor. The cost of land, buildings and equipment shall not exceed the sum of \$3,000,000. To raise the necessary funds, the comptroller of the city of New York is directed to issue city bonds.

Assembly Bill No. 1057. Introduced by Mr. Halpin. An Act:
"To amend section 395 of an act entitled 'An act to establish a code of criminal procedure' passed June first, eighteen hundred and eighty-one."

This bill amends the code of criminal procedure by adding that "a confession shall be sufficient to warrant conviction without other proof of the crime in cases of violation of sanitary codes or health laws, which is punishable as a misdemeanor."

Senate Bill No. 900. Introduced by Mr. Slater. Assembly Bill No. 1504. Introduced by Mr. Bennett. An Act: "Permitting the University of the State of New York to waive certain examinations."

This measure does not apply in any way to any certificate required under any law as a preliminary prerequisite to the practice of law or medicine. It refers to Certified Public Accountants only and is noted here because many inquiries have been made by physicians and students who were under the impression that it applied to medicine.

Senate Bill No. 663. Introduced by Mr. Slater. Assembly Bill No. 1184. Introduced by Mr. W. H. Smith. An Act: "To amend sections 834 and 836 of the code of civil procedure, relating to the competency of a witness."

This measure amends the law which makes it a misdemeanor for a physician to disclose any information acquired in attending a patient in a professional capacity, so that it applies to nurses also. It was strongly opposed on the floor of the Assembly on the ground that it was framed to apply to the testimony of a certain nurse in a case of supposed poisoning before the courts of New York at the present time. It was recommitted for further consideration.

Assembly Bill Introductory No. 1345. Introduced by Mr. Babcock. An Act: "To amend the Public Health law relative to the practice of hypnotism, mesmerism, suggestive therapeutics and allied phenomena."

No person shall practice the said sciences unless previously legalized to do so or unless he is licensed by the regents, or if he has been convicted of a felony. Each applicant for license after May 1, 1901, shall be examined by the regents, who shall require that said applicant shall have had the preliminary examination necessary to receive the degree of B. A. or B. Ph., and that he shall have studied medicine not less than two full years in a medical college of satisfactory standing to the regents. Said regents shall issue the license. Conviction for failure to comply with the provisions of this act shall be punishable by a fine of not less than \$250 or imprisonment for not less than six months. It shall not apply to those persons performing on the stage of a licensed theater.

PROGRESS OF IMPORTANT MEDICAL BILLS IN THE NEW YORK
LEGISLATURE

Though the legislature is within a few weeks of final adjournment, very little has been accomplished in the direction of enacting good medical laws and the outlook is not encouraging.

The old State Board of Health was legislated out of existence when the Governor signed the bill creating a single-headed State Health Commission. The bill was signed February 19th, the day after it passed the Assembly and about two weeks later the Senate confirmed the appointee of the Governor, Dr. Daniel Lewis, of New York City, as State Health Commissioner. Changes of the same character in the State Board of Charities recommended by the Governor met with strong opposition which, so far, has been effectual in checking the progress of the bill which is still in committee.

The bill appropriating \$120,000 for the building and equipment of a State Hospital for Incipient Tuberculosis at Raybrook in the Adirondacks passed the Senate and is still in committee on the Assembly side with rumored prospects of coming out with a reduced appropriation. The other measure of this character carrying with it provisions for a Tuberculosis Hospital on State lands at Dannemora remains in committee.

The "Lynn Type Bill" which arbitrarily provides that in the publication of books, newspapers and serial literature, "no type smaller than eight point shall be used and that the lines shall be separated by at least two point leads," has been amended giving the State Health Commission power to regulate the type and leading of books, etc., "so far as in its judgment it may deem necessary to protect the public from injury to eyesight." The original bill was strongly opposed and it is doubtful if even the amended bill will pass.

The "Christian Science Bill" of Assemblyman Hal Bell after numerous hearings and conferences has been three times amended and its present form bears little resemblance in its specific provisions to the original bill. All interests in the business world (opticians, manufacturers of instruments, proprietors of patent medicines, etc.) which it affected have been exempted. In its original application it prohibited the Christian Scientists and osteopaths from practicing in this state; the second amendment

permitted them to practice, but prohibited the taking of "remuneration, charge, fee, gift, bonus or reward," and the third amendment reads "This article shall not be construed as prohibiting any person in giving treatment to another under the direction or upon the prescription of a physician duly licensed by the laws of this state." In view of the fact that the Christian Scientists and osteopaths have deliberately treated the sick for remuneration and both directly and indirectly defied the public health and medical laws of the state, it scarcely seems likely that the restrictions of this measure will shift them from their previous course. It may possibly act favorably by creating more tangible grounds for their prosecution for malpractice, thus exposing to the public more fully the dangers of their practices and paving the way for more positive restrictive legislation. As the bill now stands, even with its negative restrictions, its adherents will have a difficult task to get it through the legislature.

The other bill of importance is the "Osteopath" bill. Upon this bill also there were several large hearings. We doubt if the fact that Mark Twain appeared at one of the hearings in favor of the bill, or if what he said, materially aided the advancement of the measure. The State Medical Society, through its representatives, Dr. Frank Van Fleet and Dr. Robert T. Morris of New York, opposed the bill. Two years ago a bill, resembling this one very closely, died in committee. This year it may appear that the osteopaths have gained a little in their long fight by the fact that their bill has been reported out of committee with an amendment but was recommitted. The amendment referred to is as follows: Any person may practice osteopathy in New York state after having passed a satisfactory examination in the studies adopted in the curriculum of the associated colleges of osteopathy, before an examining board duly appointed by the board of regents of the State of New York, "provided that the said person shall have passed a satisfactory examination in the hands of the state board of regents, in academic subjects, and provided further that no person licensed to practice osteopathy under the provisions of this act shall be allowed to prescribe or allowed to use medicines or drugs in treatment of diseases, nor be allowed to use operative surgery, or treat what are commonly known as contagious or infectious diseases." It is not probable that the osteopaths will favor the bill with this amendment.

THE "OSTEOPATH BILL"

Remarks of Dr. Robert T. Morris, of New York, at the final hearing of the "Osteopath" bill, before the Committee on Public Health of the Assembly of the State of New York, February 27, 1901.

In the *Journal of the American Medical Association* for March 2, 1901, is published the address of Dr. Morris on the "Christian Science Bill" before the Public Health Committee of the New York Assembly. The ANNALS has obtained his address before the same committee on a subject of quite as great interest and importance to the medical profession, the "Osteopath" bill, but we regret that lack of space will not permit us to give more than a full abstract.

After failing to get any osteopath present at the hearing to admit that any one of the four recognized works on osteopathy which he presented, as an authority, he attacked the principles of the works and the methods of the osteopaths. Dr. Morris essentially said:

"*Mr. Chairman and Members of the Committee:* In coming before you this afternoon I have no personal motive to gratify. I come as the representative of the regular medical profession—the medical profession whose ideals are the ideals of intellect and of character; the medical profession that builds our great medical educational institutions and furnishes hundreds of medical men during the year and edits the two hundred medical journals of America alone. Our regular medical profession has been spoken of as the old school. It is not the old school. Let us speak of the regular medical profession which investigates all things that are honest. In his work on 'Osteopathy Complete' Barbour refers to Osteopathy as the 'New Science of Healing.' In his treatment of felon he says that we are to move the muscles of the fingers thoroughly about the felon. There are no muscles of the finger, gentlemen, remember that point; there are *no* muscles of the finger and we are instructed to move them thoroughly about the felon. In the case of catarrh we are instructed to move the muscles of the forehead very thoroughly. The muscles of the forehead we could enumerate pretty rapidly. I merely wish to show the ignorance in that respect. Typhus fever is cured in half the time that it required in treatment by methods of medicine. It

is cured by manipulation which manipulation in a certain routine is applied several times a day and presumably the same manipulator goes from this patient to the next one. Do you know, gentlemen, what typhus fever is? I once admitted a patient with typhus fever into the hospital after dark. The patients on either side of him contracted typhus fever, two nurses contracted typhus fever, one of the patients in the next bed to his died, and one of the nurses died. This is what they are telling you we are to treat by manipulation. Think of it. Treating this intensely contagious disease that furnishes epidemics, that depopulates whole districts, by manipulation and going from one patient to treat another. Diphtheria never fails to yield to manipulation by the fingers in the mouth. In malposition of a certain organ of the pelvis, it is to be pushed into place, and certain movements are to be made. Many cases are treated by massage that are promptly lighted up by any movement of massage or manipulation and the case goes on from bad to worse. We are told to manipulate cases of hip-joint disease. These are tuberculosis. Tuberculosis increases promptly under these manipulations and movements.

“The authorities speak of dislocations. They find dislocated bones everywhere; they discover that bones cause troubles and find diseases of the pelvis due to the dislocation of the lumbar vertebræ. Here is a section of the back of a child and I will challenge any osteopath here to move any one of these bones one-fifth of an inch in the presence of this committee. They say they are all dislocated and profess to move them back and forth. These diseases (pelvic) are due to various dislocations. They find bones out of place everywhere. It is all dislocation of something. They replace substance of the spinal cord lost in locomotor ataxia by manipulation. Disease, when not due to dislocation, is due to the contraction of the muscles. For every disease in the head the atlas is dislocated. According to Dr. Still—‘If a bone is really dislocated and has been in that condition for years the dislocation cannot be reduced * * * * but if the muscles are contracted causing a stiff joint, they can be quickly relieved by manipulation and the patient is easily *led to believe* that the bone is dislocated.’ Quoting Barbour—‘We are very likely to discover a spot in examining the spinal column possibly no larger than half the end of the finger, much warmer or colder than the surrounding surface,

in which case a contracted muscle has obstructed circulation.' Falsehood intended to deceive and dupe patients. I have been compelled to place a young woman with sciatica under ether because of the intense pain produced by the manipulations of an osteopath who had found a bone of the pelvis out of place. In a case of epilepsy the number of attacks was increased by the manipulation of the head. In another case of epilepsy, a man of forty who had an attack once in two months and was able to attend to his work, manipulation of the head increased the frequency and severity of the attacks and the patient died from the attacks. This is truth, gentlemen, we are not joking. Mark Twain may come here with jokes; we are treating with life and death. Their methods are well known and as far as they are right are accepted by the regular medical profession, they are in use by the professional masseurs to whom we send our cases.

"We have a list of twelve governors who have said that they favor osteopathy. My father was a governor and I know something about the way such men are attacked by charlatans for the use of their name. Ex-Governor Josiah Grout of Vermont—one of the strongholds of osteopathy—in signing the bill for osteopathy, says that osteopathy 'has been tried on the leading men and women of the state and they all testify to its merits.' Rather a comprehensive statement that all of the leading people of Vermont testify to its merits. Vermont is the garbage barrel of the medical profession because of its weak medical laws. It allows all the weak medical schools to dump into it the garbage of the profession.

"Should this bill become a law; that man who has spent four years in a medical course and a year or two in a hospital is only as well fitted to care for your brothers and sisters, for the dear ones of your family, as the irresponsible citizen who has had an idea come to him, is of an uncertain education and wants to try that idea, meanwhile to receive a good income for his work. This is not to be sneezed at. I wish to impress the fact, gentlemen, that in osteopathy there is nothing that is not recognized already; that there is nothing new in it except the name."

Public Health

Edited by Joseph D. Craig, M. D.

ALBANY BUREAU OF HEALTH REPORT

An abstract of the deaths occurring in the City of Albany and registered in the Department of Health for the month of December, 1900, and for the months of January and February, 1901, is as follows:

	Dec.	Jan.	Feb.
Consumption.....	15	21	14
Typhoid fever.....	0	2	3
Scarlet fever.....	2	2	0
Diphtheria.....	6	7	4
Cholera infantum.....	0	2	0
Influenza.....	3	15	14
Pneumonia.....	8	19	21
Apoplexy.....	14	17	10
Bright's disease.....	13	18	14
Cancer.....	10	8	7
Accidents and violence...	9	5	7
Seventy years or over....	19	41	24
One year or under.....	10	9	29
Total deaths.....	132	188	156
Death rate.....	15.54	22.14	18.37

The total number of deaths from influenza during December was 3, during January 15 and during February 14. The chief cause of death from influenza was a complicating pneumonia, 9 deaths out of 14 in February, and 7 out of the 15 in January were due to this cause.

	Dec.	Jan.	Feb.
Births.....	87	71	23
Marriages.....	49	34	29

CONTAGIOUS DISEASES REPORTED

	Feb. (1900)	Feb. (1901)
Typhoid fever.....	9	7
Scarlet fever.....	24	4
Diphtheria.....	34	19
Chicken pox.....	8	15
Small pox.....	0	3
Measles.....	70	15

In addition to these cases reported there is a mild epidemic of diphtheria in one of the institutions and in another institution fifteen cases of chicken pox have been reported. There is a diminution in the number of cases of scarlet fever and the city is practically free from this disease. The number of cases of diphtheria existing outside of the institutions is quite moderate. There is a tendency of measles to spread as eight out of the fifteen cases reported developed during the last two weeks in February.

The condition of the city, in regard to small pox on the first day of March, was as follows: one case of small pox at the quarantine hospital recovered and about to be discharged; one case at the height of the pustule stage on Third street. Otherwise the city *is free from this disease.*

OUGHT VACCINATION AND REVACCINATION TO BE OBLIGATORY?

G. Lemiere speaks strongly in the affirmative on the subject. Vaccination is obligatory in France for all children. Revaccination is obligatory for all healthy men, but women and invalids are not bound to this obligation. The writer believes that revaccination after the end of seven years should be obligatory. He quotes Guinon's statement that out of seven hundred and thirty-four nurses employed in the small pox hospital in London, during a period of ten years, only ten were attacked by the disease. These men had not been revaccinated. All others who escaped had either suffered from the disease or been revaccinated.

FORMALDEHYDE GAS FOR DISINFECTING BOOKS IN LIBRARIES

For some time past the belief has been current that diseases are contracted by handling books in public, which have become infected with the germs of some disease. The New Jersey authorities have been the first to take preventive steps, owing to a case of scarlet fever, which had been shown to be transmitted by the agency of a book in a travelling library. Professor Mitchell of the New Jersey State Board of Health has been conducting a number of experiments with formaldehyde gas, using kindergarten toys and public school books, and so far it has been found the surest destroyer of microbes, working quickly and effectively.

EXPECTORATING IN STREET CARS

The officers of the Brooklyn Rapid Transit Company have issued a notice which the conductors are to hand to any person whom they see violating the health ordinance against expectorating in the cars of the company. The notice reads as follows:

“The Brooklyn Rapid Transit Company would respectfully call attention to the fact that SPITTING in cars is forbidden by the Board of Health of this city. Any violation of this section of the sanitary code shall be treated and punished as a misdemeanor, and the offender shall also be liable to a penalty of \$250.00.”—*Medical Record*, January 5, 1900.

QUARANTINE FOR DIPHTHERIA

There is a decided tendency on the part of sanitary officers to hold the quarantine for diphtheria, until a bacteriological test shows the throat free from the bacilli. The President of the State Board of Health of Delaware says “that quarantine should not be raised until culture from the throat shows no bacilli.”

THE EPIDEMIC OF INFLUENZA

The Marine Hospital Service has been making collective investigation of epidemic influenza in the United States and returns have been received from a great number of states. From these returns it seems to be the opinion of health authorities that influenza began to make its appearance between the 1st and the 15th of December last, that the type was of a mild character and that the deaths have been very largely due to complicating croupous pneumonia and broncho-pneumonia. The disease seems to have been most fatal at the extremes of life. So far as the returns have come into the Health Office, the same increase in the death rate noticed in our local reports, has been, also, the experience of other states.

THE BERTILLON CLASSIFICATION

The Bertillon system of tabulating diseases has been introduced in quite a number of places and its use has become more generally adopted.

Medical News

Edited by H. Judson Lipes, M.D.

MEDICAL SOCIETY OF THE COUNTY OF ALBANY.—A regular meeting of the Society was held March 13, 1901, in Alumni Hall. The meeting was called to order at nine o'clock P. M., the Vice-President, Dr. Martin MacHarg, in the chair. The following named members were present: Drs. Carroll, Curtis, Davis, W. H. George, Jenkins, LeBrun, Lomax, MacFarlane, MacHarg, C. H. Moore, Mosher, Munson, Neuman, Pearse, Root, Sautter, Theisen, Albert Vander Veer, Edgar A. Vander Veer, Ward and Wiltse.

The Secretary, Dr. Blumer, being absent, Dr. MACFARLANE moved that Dr. Mosher be chosen Secretary, *pro tem.*, which was carried.

1. Reading minutes of the last meeting.

Dr. WARD moved that the minutes as printed in the ANNALS be adopted. The motion was seconded and carried.

2. There were no minutes of special meetings.

3. Proposals for membership. The Secretary announced that the name of Dr. GEORGE D. STREETER had been presented. The President referred Dr. Streeter's application to the Board of Censors.

4. No reports or resolutions were presented.

5. Special communications.

The Secretary presented the following communication from the Medical Society of the State of New York:

ALBANY, N. Y., February 1, 1901.

To Presidents and Secretaries of County Medical Societies:

At the recent meeting of the Medical Society of the State of New York, the following recommendation, made by the Committee on the President's Inaugural Address, consisting of Drs. William S. Ely, of Rochester, A. VanderVeer, of Albany, and D. B. St. John Roosa, of New York, was adopted:

"Your Committee believes that it is desirable to increase the facilities for becoming Permanent Members of the Society, and hence we recommend such change in the Constitution and By-Laws as will permit each County Medical Society to send any number of delegates not exceeding five for each Assembly District, to each annual meeting of this Society, the present rules to obtain as to such delegates becoming Permanent Members."

Under this change in the By-Laws your Society is entitled to send five delegates, or such number less than five as you may see fit, instead of one, as heretofore, for each Assembly District in your County. The annual dues of your Society are not hereby increased. On completion of the term of delegacy, if registered as having attended two annual meetings, delegates become eligible to permanent membership. Delegates are in every sense members of the Society during their delegacy and can subsequently, if they so desire, become permanent members.

It is requested that you bring this to the notice of your Society at its next meeting and inform your members fully of its provisions.

Provision was also made for a Semi-Annual Meeting of the Society for

scientific purposes only during the year, and such a meeting is in contemplation, to be held in New York City in the early autumn.

Yours faithfully,

F. C. CURTIS, *Secretary*.

HENRY L. ELSNER, *President*.

Dr. WARD moved that the Secretary be instructed to print this communication and forward a copy to each member of the Society with the notice of the next regular meeting. This motion was seconded and carried.

Dr. MACFARLANE moved that the communication be referred to the Committee on By-Laws, and that this committee be instructed to consider the subject-matter of the communication and report to the Society a method for carrying its proposals into effect. The motion was seconded and carried.

6. Reading of papers.

Dr. Root read a paper on "The Effects of Influenza on the Nasal and Accessory Nasal Cavities."

The President announced that Dr. Root's paper was before the Society for discussion.

Dr. THEISEN opened the discussion with reference to Dr. Root's statements relating to the infections of the accessory nasal cavities occurring during the course of influenza, or as sequelæ of an attack of influenza. These complications are frequently overlooked, unless they are especially obtrusive. Weichselbaum found affections of the accessory cavities in over ninety per cent. of the autopsies upon influenza patients, none of which were detected during life. He agreed with Dr. Root, that these affections generally subside spontaneously, and operations are not required.

Dr. WARD referred to Dr. Root's statement, that outbreaks of influenza occur during marked changes in the weather, and did not think that the experience of the past winter would sustain this contention. He also mentioned again the experience of the Peary expedition, who were subjected to an outbreak of influenza six weeks after settling in winter quarters in the far North. He fully agreed with Dr. Root, in placing emphasis upon the frequency of middle ear complications, believing that suppurative processes of this kind are always due to double infections and not to Pfeiffer's bacillus alone. In connection with both of these questions, the relations of the disease to season, and the inter-relations of different micro-organisms, he referred to the epidemic of the past season in the North Woods. The weather had been particularly vigorous and steadily cold, and yet the outbreak of influenza was the most severe that has been experienced. It was a notable fact that the tuberculous patients almost invariably escaped, as if the two infections were mutually antagonistic. With reference to ear ache, he believed that many cases are of neuritic origin, and not due to otitis media.

Dr. THEISEN stated that Dr. Ward's remarks upon the infrequency of Pfeiffer's bacillus in the accessory cavities was borne out by statistics. Fränkel, Weichselbaum, Gradenego, and others had found Pfeiffer's bacillus very rarely.

Dr. WARD asked if it were not difficult to find Pfeiffer's bacillus, and if

this micro-organism does not respond with difficulty to ordinary bacteriological methods.

Dr. NEUMAN had made some investigations years ago into this subject, and found that Pfeiffer's bacillus might be taken for a diplococcus, as there is a liability of uneven staining, the ends of the influenza bacillus taking the stain more readily than the centre, giving the appearance of a diplococcus. In mixed infections it is always difficult to isolate the original micro-organisms, on account of the predominance of the pus organisms.

Dr. A. VANDER VEER had noticed in the earlier epidemics, before the announcement of Pfeiffer's bacillus, the frequency of abscesses of the frontal sinuses, which were at that time attributed to severe catarrhal colds. In his observation the antrum usually escaped. His operations upon the antrum had been owing to disease arising from traumatic influences, especially in relation to the teeth and jaw. Dr. Vander Veer also referred to the greater danger of infections in general surgery during influenza epidemics, and the necessity of the strictest precautions in preparing for operations.

Dr. WARD referred to three cases occurring in his practice, in which there had been intense pain and swelling in the left side of the face, with a discharge through the nose, and thus every appearance of inflammation of the antrum; and in all three cases there was no suppurative disease, but rather an indication of simple excess of the natural secretions of the antrum.

Dr. ROOT, in closing the discussion, said that because the influenza bacillus is not found in the discharges from the accessory cavities, this is not an indication that the process was not instituted by this bacillus. He believed that affections of the antrum are now more frequently diagnosed than formerly.

Dr. C. H. MOORE then read a paper upon "The Ocular Complications of Influenza."

The President declared Dr. Moore's paper before the Society for discussion.

Dr. PEARSE stated that there is no general disease in which the oculist is more interested than influenza, because this disease may invade every structure of the eye. Dr. de Schweinitz has recently reported a case of retro-bulbar optic neuritis, in which there was cupping of the optic disc, closely resembling that of glaucoma; and he believed that many cases of so-called glaucoma accompanying influenza were really affections of the nerve of this character.

Dr. MUNSON divided the influenzal complications about the eye into two classes, the inflammatory and the nervous. He believed that the infection proceeds more generally from the nose through the nasal duct to the eye than that it originates in the eye, and the eye in this way is secondarily invaded. He reported a case of a physician who presented convergent strabismus following an attack of influenza, in whom recovery followed the use of iodide of potassium. He was confident of the influenzal origin of the palsy. He had also been able to attribute a chalazion to a preceding influenzal conjunctivitis. In another case an orbital abscess appeared to

follow an attack of grip. Intense supra-orbital neuralgia has also been attributed to influenza, and this neuragic affection usually occurs one week or two weeks after the acute disease has passed away.

Dr. CURTIS prefaced his remarks with a statement as to the great value of the study of influenza, which has been undertaken by the Society during the winter, and the interesting points brought out in the discussions. He had been especially struck by Dr. Ward's reference to the antagonism of tuberculosis and influenza. Nevertheless, the mortality returns have shown a marked increase in tuberculous causes during the prevalence of influenza. There has also been a larger number of deaths from diabetes, Pott's disease, and other constitutional affections. There is no other disease in our experience which touches so many points, and reaches so many tissues as influenza, either directly or indirectly. He thought that further study should be made of influenza, especially as to its etiology. The relations of the infection to weather are important, but the results of comparisons have been indefinite, and he recalls one month of April in the nineties, when there was the largest mortality of any corresponding month in the records.

Dr. WARD referred to two cases, in which there had been attacks of temporary central blindness, in one case in one eye, and in the other in both, and asked Dr. Moore for an explanation of this symptom.

Dr. MOORE mentioned spasm of the retinal vessels as a possible explanation of such conditions as described by Dr. Ward, but did not believe that any wholly satisfactory reason could be given.

There appearing no further business, the Society, on motion, adjourned.

J. M. MOSHER, *Secretary, pro tem.*

MARTIN MACHARG, *Vice-President.*

UNION UNIVERSITY: ANNUAL CATALOGUE.—The annual catalogue of Union University for the one hundred and sixth academic year has just been issued, and is a work of the printer's art. Heretofore the five several departments of the University have been kept entirely separate, but this year the faculties of all the colleges are united under the "University Faculty" in the order of appointment irrespective of the department.

ALBANY COLLEGE OF PHARMACY: GRADUATION OF THE CLASS OF 1901.—The twentieth session of the Albany College of Pharmacy closed March 12th, by the graduation of the Class of 1901. The exercises were held at Odd Fellows' Hall, and a banquet followed at the Hotel Ten Eyck. After the address of welcome by Dr. Willis G. Tucker, President A. V. V. Raymond conferred the degrees. The address to the graduates was delivered by Rev. J. Walter Sylvester, which was followed by the valedictory, by George L. Southworth. The prizes were awarded by Dr. Alfred B. Husted as follows: for best senior in all branches, \$20 in gold, Earl J. Vosburg; honorable mention, Fred L. Albee, Herbert A. De La Mater, Charles M. Otis, Jr.; Alumni Association prize, for best work in pharmaceutical laboratory for year, \$20 in gold, Catherine Ross; honorable mention, Earl J. Vosburg, Charles M. Otis, Jr.; prize in microscopy, \$10 in gold, Fred L. Albee; honorable mention, Frank M. Post, William A.

Larkin; junior prize for best examination in all branches, \$15 in gold, Andrew H. Witze; honorable mention, George G. Lenney, John E. McMany, John J. Monahan; prize offered member of junior class doing best work in chemistry, \$15 in gold, Andrew H. Witze; honorable mention, John J. Monahan, L. Clayton Barrows, Lawrence H. Burke; prize offered junior in pharmaceutical laboratory, \$15 in gold, honorable mention, H. B. Greeman, F. C. Barrows, J. D. Sauter.

The graduates are: Fred Leeman Albee, Walton; Orville Scott Clark, Jacob Cohen, Albany; Herbert Andrew De La Mater, Athens; Casper James Dobrocinski, Schenectady; Francis Henry Donaldson, Gilbertsville; John Henry Dwyer, Oswego; Charles Harvey Fox, Boonville; Frank Huddleston Havens, Albany; Verne Hicks, Syracuse; William Bailey Hogan, Albany; William Atwood Larkin, Plattsburg; Jesse Washington Leavitt, Dolgeville; James Harvey McCullough, Cohoes; George Lucas Mesnig, Walter James Moffitt, Troy; Leon Francis Montgomery, Watervliet; Eugene Lewis Myer, Saugerties; Charles Monroe Otis, Jr., Tivoli; Frank Malcom Post, Hinesburg, Vt.; Ralph Arthur Purinton, Bristol, Vt.; Samuel Tilden Quinn, Ballston; Daniel Rice, Cambridge; Catherine Ross, Hoosick Falls; George Saunders Slade, Oneonta; George Laurence Southworth, Syracuse; Guy Gardner Stephenson, Johnstown; Charles Neil Stewart, Rensselaer; Earl Jonas Vosburg, West Copake.

Orville S. Clark, Verne Hicks, James H. McCullough, Frank M. Post and Ralph A. Purinton have passed all examinations, but their diplomas are withheld until they complete the college requirements as to age or term of apprenticeship. Certificates are issued to them, exchangeable for diplomas when they shall have satisfied the above mentioned requirements.

The following students have completed the course and passed the examinations in past years, and their diplomas are issued now, on their completing the required term of apprenticeship: Fred Welcome Churchill, Brandon, Vt.; Fred Van Ness Corey, Gloversville.

At the banquet Ulrich Wiesendanger, '94, presided as toastmaster. These toasts were responded to: "Union's President," Dr. Raymond; "The Class of '91," William L. Palmatier, '91; "The Class of '01," Guy G. Stephenson, '01; "The Faculty," Prof. Alfred B. Husted; "The Pharmacist Who Has Forsaken Pharmacy," Harry M. Sweet, '86; "The Doctor," William C. Griswold, M. D., '93; "Report of the Historian, Class of '01," George L. Mesnig, '01.

At Alumni Hall, the nineteenth annual meeting of the Alumni of the Albany College of Pharmacy was held, and President Ulrich Wiesendanger, of Yonkers, presided. William L. Palmatier, of Mechanicville, the historian of the society, made a report on the Class of '91, and Warren L. Bradt, '89, of Albany, read a paper on "Some Misunderstandings of the New State Pharmacy Law." These officers were then elected: President, Charles H. Mausheffer, Lansingburg; first vice-president, Warren L. Bradt, Albany; second vice-president, Frank H. Havens, Albany; treasurer, Edwin C. Hutman, Albany; secretary, Theodore J. Bradley, Albany; historian, Herbert G. Davenport, Watervliet; executive committee, W. L. Bradt, George C. Hogan, Charles G. Rappe, Orville S. Clark and Fred W. Schneider.

ALBANY HOSPITAL FOR INCURABLES.—The trustees of the Albany Hospital for Incurables have recently purchased a plot of ground on Allen street, Pine Hills, for the erection of the new Hospital for Incurables. The residents of Pine Hills remonstrated, however, against the building of a hospital in that growing residential section, and appointed a committee to confer with the hospital managers and the Mayor, and to endeavor to have the site changed. The Pine Hills committee contended that the city should donate a site for this charitable institution, and suggested that a sufficient plot of ground on the Almshouse farm would never be missed. The Mayor favors the proposition that the city donate a site for the hospital, and it was agreed that a bill be drafted and introduced in the legislature legalizing the grant by the city of sufficient land for the necessary purpose.

The proposed site for the hospital faces on New Scotland avenue, and is a little to the west, although on the opposite side of the avenue, of the Albany hospital and is a most excellent location.

THE ALBANY GUILD FOR THE CARE OF THE SICK POOR: TWENTY-FIRST ANNUAL REPORT.—The annual report of the Albany Guild for the Care of the Sick Poor for the year ending January 31, 1901, has recently appeared. This report is of more than usual interest, and shows the great amount of good done by this most worthy society. Under the presidency of Mrs. W. W. Byington, the Board of Managers have succeeded in greatly broadening the field of work by the establishment of special dental and obstetrical departments, which have already been noted in the ANNALS. The officers, as elected for the present year, are as follows: Mrs. W. W. Byington, president; Mrs. F. C. Huyck, vice-president; Mrs. C. J. Buchanan, treasurer; Mrs. Joseph Gavit, financial secretary; Mrs. R. D. Williams, recording secretary; Miss Mary W. Olcott, corresponding secretary.

The statistics for the year ending January 31, 1901, are as follows:

Patients: Number of district cases, 456; dispensary cases receiving home care, 25; dental, 5; moderate income, 187; total number of patients treated, 673, an increase of 191 over the number reported last year. Of the district or charity cases, 134 were reported by the health physicians, and 322 by other physicians.

Physicians: Cases were reported to the Guild by the city physician, by all the health physicians and by 73 other physicians. Total number of physicians under whom the Guild nurses have worked, 79; number of dentists, 6.

Diseases: Classification, general medical, 326 cases; general surgical, 137; gynæcological, 92; obstetrical in general work of Guild, 64; in special obstetrical department, 9; skin, eye and ear, throat and nose, 40; dental, 5.

Special Obstetrical Department: Beginning October, 1900: Number of patients, 9; obstetrician, 1; number of calls, 53; students in attendance, 10; calls made by students, 58; number of nurses, 5; visits made by nurses, 77; total number of visits for the department, 188.

Visits of Guild Nurses: Number of visits with special treatment, 6,730; for professional supervision of convalescents, 2,379; total for year, 9,109; increase over number reported last year, 908.

STATISTICS FOR FEBRUARY, 1901.—*Cases*: District cases, 34 (this includes six dispensary cases receiving home care and one dental case); moderate income cases, 12; total number of new cases for the month, 46. *Physicians*: These patients were reported to the Guild by 5 health physicians and by 14 other physicians; dentist, 1. *Classification of Diseases*: Medical, 26; surgical, 4; gynæcological, 15; dental, 1. *Visits*: Number of visits with nursing treatment, 485; for professional supervision of convalescents, 228; total number of visits for March, 713; transferred to hospitals, 3; died, 7.

NEW YORK STATE BOARD OF HEALTH: JANUARY BULLETIN.—According to the January bulletin, the total mortality for the month is 12,524, 2,000 above the average, the acute respiratory being 2,720. All local diseases are much increased from last month. There were 2,570 deaths at and above the age of 70 years, as many as under five years. *Small-pox* has spread considerably during the month, having developed at Sharon Springs, Cherry Valley and vicinity; Watertown and vicinity; Glens Falls and vicinity; Syracuse, Herkimer, Mohawk and Starkville; Waterford, Ballston Spa., each a case; and one or two cases each as Hudson, Fishkill, Peekskill, Mt. Vernon, White Plains, Southold, and one at Niagara Falls.

Dr. F. C. Curtis gave a most excellent resumé of the eleven epidemics of influenza, which has occurred in this State beginning with the first, which reached its height in January, 1890. During this period 61,750 deaths have occurred from this disease. The epidemic of last year, which reached its height in March, was the most severe, there being 11,500 deaths. The State is now in the course of the twelfth occurrence of gripe; affecting the mortality of December by about 500, it has increased in January the number of deaths by probably 3,000, and was still in progress during February. Of the distribution of the disease it has not been found to be one of either the city or country. It is a disease of the colder months. It has varied greatly in severity in different years; it seems likewise to have varied greatly in virulence in different localities, and shown varying types. It is evidently communicable from the individual directly, possibly mediately and conveyed in infected clothing. Like all zymotic diseases, susceptibility to it varies; unlike some, immunity does not follow a previous attack.

PRIZE OFFERED BY THE COLORADO STATE MEDICAL SOCIETY.—The Colorado State Medical Society offers a prize of twenty-five dollars for the best essay, if deemed worthy of the prize, pointing out the dangers to public health and morals, especially to young persons, from quackery as promulgated by public advertisements.

The competition is open to all. Essays must be type-written in the English language, and submitted before May 15th, 1901. Each essay must be designated by a motto; and accompanied by a sealed envelope, bearing the same motto, and enclosing the name and address of the author. The essay receiving the prize will become the property of the Society for publication. Others will be returned on application. Essays should be sent to the Literature Committee, Room 315, McPhee Building, Denver, Colorado.

NEW YORK UNIVERSITY BULLETIN OF THE MEDICAL SCIENCES.—New York University marks the opening of the twentieth century by a new form of public announcement. In place of the circulars of schools and the general catalogue issued heretofore, without any fixedness of dates, they propose a Bi-weekly Bulletin which shall comprise in its twelve numbers the general catalogue, the circulars in succession of the ten schools, the report of the library, and the report of the Chancellor, with such additional information as may seem important to be published in the interests of the University. The present number presents the Annual University Announcement and General Catalogue.

The Macmillan Company, agents of the "New York University Press," will publish, early in March, the first number of a Scientific Quarterly under the title NEW YORK UNIVERSITY BULLETIN OF THE MEDICAL SCIENCES, edited, under the auspices of The New York University Medical Society, by an editorial committee consisting of B. Farquhar Curtis, M. D., Robert J. Carlisle, M. D., E. K. Dunham, M. D., John A. Mandel, and William H. Park, M. D. The contents of the first number will include articles on Gelatin as a Food-Stuff, A Method of Determining the Existence and Degree of Acid Intoxication by Ureanalysis, The Alloxuric Bodies, Effects of Cold on Bacteria, etc.

STATE BOARD OF REGENTS: RECENT APPOINTMENTS.—At a recent meeting of the State Board of Regents, the following appointments were made: Dr. Joseph P. Creveling, of Auburn, and Dr. Eugene Beach, of Gloversville, were reappointed medical examiners to represent the State Medical Society. Dr. Willard N. Bell, of Ogdensburg, was reappointed medical examiner to represent the State Homœopathic Medical Society, and John B. Garrison, of New York City, to fill the vacancy occasioned by the expiration of the term of Edward Chapin. In accordance with the recommendations of the medical council, to secure the fairest representation of the medical schools of the State, Dr. William Gilman Tompson, of Cornell Medical School, and Dr. Willis G. Tucker, of Albany Medical School, were appointed members of the medical council for five years and three years respectively, in place of Drs. Mann and Didama, the members to retire having been selected by lot.

PERSONAL.—Dr. ALBERT VANDER VEER and Dr. SAMUEL B. WARD have been appointed consulting members of the staff of the new State Hospital for Crippled and Deformed Children at Tarrytown.

—Dr. WILLIAM J. CAVANAUGH (A. M. C. '99), has been appointed assistant physician at the Hudson River State Hospital.

Book Reviews

A Text-Book of Pathology in Relation to Mental Diseases. By W. FORD ROBERTSON, M. D., Pathologist to the Scottish Asylums; Formerly Pathologist to the Royal Edinburgh Asylum. Illustrated with Sixteen Lithographic Plates in Black and in Colors and Thirteen Engravings. Edinburgh: William F. Clay, 18 Teviot Place. 1900.

This book deserves to accomplish its purposes, which the author, in the

preface, says "are to endeavor to awaken a more general interest in the study of the pathology of insanity in the asylums of this country, and to assist those who are anxious to carry out original researches in this department of medical sciences."

In the chapter on post-mortem examinations and histological methods, an excellent form for recording autopsies is given and only those methods of histological technique which are considered most important are described. The author then takes up morbid conditions of the scalp, and here gives the results of his study of hæmatoma auris, which he concludes is primarily due to a cystic degeneration of the cartilage of the ear. He believes that the occasional finding of bacteria is due to a secondary infection, and that they are not the cause of the condition. In considering morbid conditions of the skull it is noted that craniological statistics are lacking in Great Britain, and it is shown that measurements may be made at autopsies without increased disfigurement.

From a careful study of sub-dural false membranes, the author concludes that there are two varieties of this lesion, but that neither is due to inflammation. In one class of cases, common in the sane as well as the insane, there is hæmorrhage from an artery or vein, while in the other, most common in the insane, there are small multiple hæmorrhages due to degeneration of the dura itself.

The description of the normal structure of the pia-arachnoid differs somewhat from that usually given. From the study of horizontal and oblique sections, the author concludes that there is but one membrane, the pia-arachnoid, and that, instead of a sub-arachnoid space, there are arachnoid trabeculae and arachnoid spaces. The conditions of cloudiness and thickening of the pia-arachnoid are found to be due to proliferation of endothelial cells, and not to infiltration of leucocytes, as generally described, except in advanced cases of general paralysis and in syphilitic insanity. Dr. Robertson also believes that the structures described as neuroglia do not consist of a single tissue developed from the epiblast, or from both epiblast and mesoblast, but of two distinct tissues, one derived from the epiblast, and the other from the mesoblast. It is suggested that the term neuroglia should be applied only to the former, and that the latter should be called mesoglia.

In dealing with the histology and pathology of nerve cells, much space is given to the work and conclusions of other investigators, and the recognized changes in all structure in experimental work and disease are fully described. The arguments of both sides in regard to the neurone theory are given, especially those of Apáthy and Bethe, on one side, and Lenhossék, Lugaro and van Gehuchten, on the other, and the conclusion is reached "that no discovery that has yet been made really weakens the case for the neurone theory."

In regard to the intra-cranial lymphatic system and cerebral circulation, the author does not agree with the Monro-Kellie doctrine, that the quantity of blood in the cranial cavity is practically invariable, nor with Magendie, that variations can occur by an ebb and flow of cerebro-spinal fluid between the cranial and spinal cavities. He believes that variations in the quantity of blood within the cranium are made possible by inverse variations in the

amount of cerebro-spinal fluid in the lymph spaces of the brain and pia-arachnoid.

In considering the pathology of the more important clinical types of mental disease, the author expresses the belief that toxins are the principal exciting causes of the acute forms of insanity, general paralysis and senile, epileptic and alcoholic insanity.

This book is certain to be of great value to all who are interested in mental and nervous diseases, and especially to those who are at work on their pathology. It contains the results of many original histological and pathological investigations, and also gives an exhaustive summary of the work of other pathologists, with an extensive bibliography at the end of each chapter. The author writes clearly and concisely, and his conclusions as to doubtful questions are drawn from his own observations, or those of other investigators of established reputation. The book is freely illustrated by original colored plates and by reproductions of recent drawings of other pathologists, and contains an index of subjects and one of authors.

R. G. C.

The Care of the Consumptive. By CHARLES FOX GARDINER, M. D. 12mo. Cloth, 182 pp. Published by G. P. Putnam's Sons, New York and London, 1900.

The author has successfully attempted to produce a book which can be safely placed into the hands of the laity. The importance of literature for such purposes is apparent when we consider how largely the control of tuberculosis depends upon the intelligent action of those affected by this disease. Such a book as Dr. Gardiner has given us forms a valuable supplement to the physician's personal instruction, and should facilitate our crusade against the ignorance concerning this disease which prevails among the laity at the present time.

In the introductory chapters the author gives a simple and complete description of the nature of tuberculosis, and the manner of its communication. Then in a practical way he treats of the management of the tubercular patients, regarding especially the use of such natural therapeutic agencies as fresh air, sunlight, food, rest, and exercise. From a physician's standpoint, the closing chapter, which is on Colorado, will be of especial interest. The facts the author gives regarding the climate and its adaptability as a resort for tubercular invalids, are based on a personal experience of sixteen years. He clearly points out the varieties of the cases which do, and those which do not do well in that region.

G. D. S.

Student's Edition. A Practical Treatise on Materia Medica and Therapeutics, with Especial Reference to the Clinical Application of Drugs. By JOHN V. SHOEMAKER, M. D., L.L. D., Professor of Materia Medica, Pharmacology, Therapeutics, and Clinical Medicine, and Clinical Professor of Diseases of the Skin in the Medico-Chirurgical College of Philadelphia; Physician to the Medico-Chirurgical Hospital, Etc. Fifth Edition. Thoroughly Revised. 765 Pages. F. A. Davis Company. New York. Philadelphia. Chicago. 1900.

The author states in his preface to this edition, that it will differ from

the previous editions, in that it will be divided into two editions, each independent of the other. The present issue to be known as the Student's Edition, and the other, which will follow shortly, as the Physician's Edition. This work has many points which will recommend it to the student, both as a text-book and a book of reference. The description of the drugs and different preparations is based on the pharmacopœias of the United States and Great Britain. There is no mention of those drugs which have not yet, by clinical experiments, been finally placed in their correct therapeutic class, and the student is given no dead or extra wood to carry.

Part One is made up of general considerations concerning remedies and systems of treatment, descriptive sections on pharmacology and the pharmacopœia, materia medica (organic and inorganic), pharmacy, prescription writing and formulæ, poisons and antidotes, and general therapeutics and classification of remedies. In consideration of the fact that, in medical works, the Troy measure is being gradually displaced by the metric system, throughout the book the metric system is given precedence, but always followed by a reduction to the Troy scale.

Part Two consists of the pharmaceutical agents, with their pharmacology, physiological and toxic action and therapeutic application. The scheme of this section is that of a reference book rather than a text-book for students. There is no classification according to physiological action or therapeutic application. The drugs are considered in alphabetical order. Each alkaloid is considered under its parent drug. The very green student would find frequent recourse to the index necessary, but we cannot say that this is an objection. The simplicity of the scheme is in its favor. The indices, general and clinical, are very complete. H. S. P.

Guy's Hospital Reports. Vol. LIV. Being Vol. XXXIX of the Third Series. Edited by E. C. PERRY, M. A., M. D., and W. H. A. JACOBSON, M. Ch. Published by J. and A. Churchill. London. 1900.

The ANNALS is fortunate in receiving each volume of these reports as it is published. Ordinarily Hospital Reports are compiled on a statistical basis, and are of little value clinically. Each volume of the reports of Guy's Hospital, however, consists of papers written mostly by members of the staff, dealing with series of clinical cases in the wards, or of rare or important cases.

The present volume contains sixteen papers. The most important are: Splenomegalic Cirrhosis of the Liver, by Frederick Taylor, M. D., with colored plate and skiagram; Some Cases of Exophthalmic Goitre, Associated with Increased Intraocular Tension, by W. A. Brailey and J. W. H. Eyre, clinical record of five cases, with numerous plates, showing contractions of the visual field; A Case of Addison's Disease, Fatal by Suppression, by T. Wilson-Smith, M. D.; A Case of Fatal Homicidal Fracture of the Larynx, by Lockhart Stevens; and The Course and Symptoms of Abdominal Actinomycosis, by H. M. Stewart, M. D.

To one who does much writing, these reports would be of great value for reference.

H. S. P.

A Text-Book of Histology, Including Microscopic Technic, by A. A. BÖHM, M. D., and M. VON DAVIDOFF, M. D., of the Anatomical Institute, in Munich. Edited, with Extensive Additions to Both Text and Illustrations, by G. CARL HUBER, M. D., Junior Professor of Anatomy and Director of the Histological Laboratory, University of Michigan. Authorized Translation from the Second Revised German Edition, by HERBERT H. CUSHING, M. D., Demonstrator of Histology and Embryology, Jefferson Medical College, Philadelphia. With 351 Illustrations. Philadelphia: W. B. Saunders & Company. 1900.

This book is a translation of a well-known German text-book on Histology. As stated by the authors in the preface to the first German edition, their aim was to present as fully as possible, both from a theoretical and technical standpoint, the subject matter of the lectures and courses in histology given in the University of Munich.

The American edition is edited by Dr. Huber, who has made additions to the German text, incorporating the results of recent studies, as, for example, those of Mall with reference to the structure of the spleen.

The nervous system has been given more attention than in the original text, especially the subject of nerve endings.

The sections on technique, which are detailed and complete, include an introductory chapter on general microscopical methods, and in the body of the work, following the descriptions of the various tissues, are given special methods for demonstrating their structure.

Reference to recent literature are given in an appendix.

The book will be found a very valuable one by students and teachers of histology.

A. T. L.

Retinoscopy (or Shadow Test) in the Determination of Refraction at One Meter Distance with the Plain Mirror. By JAMES THORINGTON, A. M., M. D., Professor of Diseases of the Eye in the Philadelphia Polyclinic and College for Graduates in Medicine, Etc. Fourth Edition. Revised and Enlarged. Fifty-one Illustrations, Twelve of which are Colored. P. Blackston's Son & Co. Philadelphia. 1901.

The demand for this little work has necessitated the issuing of four editions in as many years. It explains as simply and clearly as possible the most difficult, but the most accurate and satisfactory method of refraction—retinal illumination by rays of light reflected from a mirror. In addition to the essential principles of the test, the way to apply them, and many practical points of great value, the author describes and lays great stress upon the relative positions of the patient, observer and source of light which he has found to give the most accurate results. The illustrations, all but two of which are original, help greatly to a clear understanding of the text. It is by far the best description of Retinoscopy extant, and has done more to make the test simple to those who have tried it and failed than any other work. For the student, it is invaluable, starting him on the right track to a clear practical knowledge, under the best

possible conditions. He will find it an excellent adjunct to the author's work on "Refraction and How to Refract." French and German translations have been asked for, and are being prepared. We cannot recommend it too highly to students of ophthalmology and to ophthalmologists.

H. S. P.

Current Medical Literature

SURGERY

Edited by A. Vander Veer, M. D.

The Transplantation of Tendons and its Results in the Treatment of Palsies. (Ueber die Sehnenüberpflanzung und ihre Erfolge in der Behandlung von Lähmungen.)

OSCAR VULPIUS. *St. Petersburger medicinische Wochenschrift*, No 34, 1900.

The writer is enthusiastic in urging the transplantation of tendons for the treatment of paralyzed limbs, and reports satisfactory results with the method which he has called the "Descending Method." He does not attempt to select the larger muscles for the operation of transplantation, but has obtained better results by taking an entire group, as there are often unaffected fibres in paralyzed muscles, in which the association with active structures prevents the occurrence of an atrophy of disuse. The so-called "periosteal" method, which does not provide for the attachment of the healthy muscle to the tendon of the paralyzed muscle, he does not regard as an improvement. The natural insertion would be that which brings into activity all possible fibres. The writer describes the principles of the operative procedure, among which may be mentioned the position of the limb after operation, in moderate contraction of the affected parts; that is, the deformity is slightly "overcorrected." Spastic palsies, as well as flaccid conditions, may be submitted to the operation, and patients afflicted with Little's disease, both the hemiplegic and diplegic forms, cerebral palsies of children and apoplectic hemiplegias are proper subjects, as well as cases of infantile paralysis.

The results so far attained have been very gratifying, especially in affections in the lower extremities. The author reports an illustrative case, in which the biceps were transplanted for the reinforcement of a paralyzed quadriceps extensor, with most excellent effect. Some operations upon the forearm have also resulted favorably, but fewer cases involving the upper extremities have presented themselves.

Experimental Investigations Concerning Sterilization of Catheters with Some Remarks in Regard to Asepsis in Catheterization of the Ureters. (Experimentelle Untersuchungen über Katheter-Sterilization, nebst Bemerkungen zur Asepsis des Ureter Katheterisimus.)

M. KATZENSTEIN. *Berliner klinische Wochenschrift*, September 10, 1900.

The writer briefly discusses the methods hitherto employed in the sterilization of the so-called soft catheters and bougies. The method first em-

ployed was to wash them carefully in soap and water and then soak them in a bichloride solution for one-half to one hour. This method did not render them aseptic and furthermore it injured the catheters. Kutner's apparatus for sterilization of catheters by driving live steam through them is also very unsatisfactory because after two or three sterilizations the catheters are worthless.

The writer has conducted a series of experiments in connection with the sterilization of catheters, using formaldehyde vapor. The catheters were infected with a variety of pathogenic bacteria encountered in diseases of the urethra and bladder. He first subjected the catheters to the formaldehyde vapor at a temperature of 15 degrees and found it required 24 hours to render large catheters sterile, while it was simply impossible to sterilize ureteral catheters. He tried next formaldehyde at 37 degrees C. and found that the large catheters were rendered sterile in twelve hours, while the ureteral catheters were not. He then conceived the idea of increasing the temperature of the formaldehyde and thus exposing the catheters to a more concentrated vapor. He also devised an instrument by means of which a current of the strong vapor is forced through the catheter, and thus all sizes can be rendered sterile. The temperature in the formaldehyde generator should be from 70° to 80° and the time of exposure about twenty minutes. To promote the currents of vapor through the catheters and to absorb the vapor he uses phenylhydrazin which has a marked affinity for formaldehyde. The writer advises against the use of liquid formaldehyde as well as against the use of the pastilles and recommends only the pure trioxymethylene powder.

The writer concludes:

(1) The disinfection of catheters with bichloride of mercury is unsatisfactory.

(2) The use of live steam for the disinfection of catheters is also unsatisfactory, because of the damage done the catheters.

(3) The disinfection of catheters with formaldehyde vapor as hitherto practised is too slow and for catheters of small calibre incomplete.

(4) The apparatus devised by the writer enables one to render all sizes of catheters absolutely sterile in from ten to twenty-five minutes without any injury to the catheters.

Exclusion of the Intestine. (De l'exclusion de l'intestin.)

F. TERRIER and A. GOSSET. *Revue de chirurgie, August, 1900.*

The writers discuss the three methods by which an intestinal anastomosis may be done: (1) simple anastomosis; (2) anastomosis with resection of intestine; (3) exclusion of a portion of the intestine without removal of the excluded portion and with restoration of the intestinal circulation.

There are three varieties of exclusion of the intestine: (1) complete exclusion when the two ends of the excluded portion are closed; (2) incomplete exclusion when one end of the excluded portion is closed and the other is left open; (3) exclusion with both ends of the excluded portion opening into the abdominal wound.

Thiry in 1864 first practised exclusion of the intestine experimentally upon dogs. Trendelenberg in 1885 was the first to practice intestinal exclusion upon the human being. Salzer in 1891 published the results of extended experiments upon dogs to determine the best method of exclusion. His conclusions were that a so-called partial exclusion allowing the excluded portion to open upon the surface was to be preferred, although two of his dogs survived an operation for total exclusion in one of which almost complete atrophy of the excluded loop had occurred. The indications for exclusion appear to be inoperable neoplasms, tuberculosis, fecal fistula and in general those conditions in which removal of the diseased area of intestine is impossible or inadvisable and in which it is desirable to prevent contact of the fecal matter with the diseased area. Up to 1898 there had been twenty-four cases of exclusion of the intestine practiced upon human beings reported, and many of them successful cases.

The important question seems to have been as to the most desirable mode of exclusion to be practiced. Baraez and Obalinski have both published successful cases in which total exclusion, that is, with closure of both ends of the excluded intestine was done. Other cases, however, in which this method has been adopted have proved unsuccessful. The chief objection to total exclusion seems to be the accumulation of intestinal secretion in the excluded loop, in which the bacteria proliferate, and serious trouble results. In so-called partial exclusion, that is, when one or both ends of the excluded intestine are fastened into the wound an escape for the intestinal juices, etc., is afforded. The general consensus of opinion seems to be that partial exclusion is by far the safest procedure and is to be practised whenever exclusion is indicated.

NEUROLOGY

Edited by Henry Hun, M. D.

Concerning the Clinical Course and the Pathologico-Anatomical Changes in a Severe and Extraordinary Case of Exophthalmic Goitre, Characterized by Hemiplegia, and Bulbar and Mental Disturbances. (Ueber den klinischen Verlauf und die pathologisch-anatomischen Veränderungen eines schweren durch Hemiplegie, bulbäre und psychische Störungen ausgezeichneten Falles von Basedowscher Krankheit.)

DINKLER. *Archiv für Psychiatric und Nervenkrankheiten*. XXXIII, 2, 1900.

The number and severity of the nervous symptoms in exophthalmic goitre suggest an anatomical basis for the manifestations on the part of the nervous system, but no constant lesions have yet been described, the various nervous changes reported from time to time having been more in the light of complications or incidents. The case which is made the subject of this paper presented symptoms attributable to changes in the liver, kidneys, heart, thyroid gland, thymus, nervous system and body musculature. Besides the struma, cardiac palpitation and exophthalmos, the following symptoms were worthy of note: strong arterial pulsation, roaring and

vascular murmurs over the thyroid, systolic mitral murmur with dilatation of both sides of the heart, Stellwagen's, Græfe's and Moebius' signs, tremors of the hands, diminution of the electrical resistance of the skin, tendency to cry and to laugh, hasty speech, marked acceleration of all voluntary movements, hyperidrosis, falling of the hair, diarrhœa and vomiting. The patient revealed an entire change of character, suffered from hallucinations of all senses, became egoistic, disorderly, wasteful, and untidy. These mental changes were followed by symptoms on the part of the motor system, beginning with light twitching of the left side, both in limbs and face, and similar to the movements of chorea. After a short time these movements became stronger and coincidentally there was marked weakness of the muscles, resulting in pronounced hemiparesis with diminution of the irritative movements. The hemiparesis was progressive, resulting in flaccid paralysis of limbs, face and tongue, and was followed by bulbar symptoms. The latter were indicated by loss of facial expression, nasal speech, and regurgitation of food, of variable constancy and suggesting in their character and course myasthenia pseudo-paralytica.

The author presents a careful and exhaustive description of the histological examination. The cerebral cortex of the central convolutions of both sides was markedly diseased. The ganglionic cells in numerous regions were changed, and in the right motor region the degenerative foci were so numerous and pronounced that in the stained specimen they were visible to the naked eye. There was also plainly marked descending degeneration through the bulb and into the cord, with involvement of the nuclei of the cranial nerves, especially of the facial and hypoglossus.

The author compares the symptoms with the pathological conditions and believes that the completed case is in accord with the assumption by Moebius of an intoxication as the cause of the disease. He believes that with careful means of examination for the nervous system changes may be found in the lighter cases, and he prefers Nissl's method over that of Marchi. He also discusses the relations of the thymus to exophthalmic goitre, and argues that the functions of the thymus and thyroid and accessory glands are analogous, and that the one may be affected in one case and the other in another, or all may be involved in the same case. The difficulty of determining this point, and the inaccessibility of the thymus are against surgical procedures, and explain the failures of surgical operations undertaken for the cure of the disease. As long as it is impossible to determine the size of the thymus or the existence of accessory thyroid bodies in the individual case, so long will the results of operative treatment be simply a matter of chance.

Clinical Forms of Paralysis of the Brachial Plexus. (Formes cliniques des paralysies du plexus brachial.)

HENRI GRENET. *Archives générales de médecine*, October, 1900.

Paralysis of the brachial plexus may be classified as to the site of the lesion or as to its character. The writer discusses the anatomical features of the brachial plexus, and the nature of the lesions by which it is affected,

showing the resulting paralyses, which may be assigned to diseases of the roots, of the plexus itself, or of the peripheral branches. His conclusions are:

1st, with reference to *mixed paralyses*:

a. As many forms may be described as there are segments of the plexus: disturbances of the roots may be within the spinal canal, or without, leading to affections of the first, the second and the third segments, or paralyses of the terminal branches.

b. Examination of the collateral nerves of the plexus is necessary for differentiation of these forms.

c. Paralysis of the superior root may be recognized by paralysis of the muscles above and below the scapular spine, innervated by the supra-scapular nerve. An intra-rachidian location of the lesion of the superior root is determined by paralysis of the serratus magnus.

d. Paralysis of the first portion of the intra-rachidian segment of the inferior root (before the exit from the foramen and the junction of the roots) is recognized by pupillary anomalies. But a palsy of the inferior root may not be associated with pupillary disturbances if the site of the lesion is beyond the anastomosis with the sympathetic.

e. Between an extra-rachidian paralysis of the inferior root, and a paralysis of the first segment of the plexus, there is no important clinical distinction.

f. Many forms are secondary; there exist in reality only two grand clinical types; paralyses of the root form, and paralyses of the terminal form.

g. Paralyses described under the name of paralyses of the plexus are properly divided sometimes into the radicular type (first segment), and sometimes into the terminal type (third segment). These constitute the special clinical forms, and the accessory forms classify themselves as pertaining to one or the other of these grand types.

2nd, with reference to *motor paralyses*:

a. Pure motor paralyses result ordinarily from an isolated lesion of the anterior roots. Sometimes the lesion may affect the junction of the anterior and posterior roots with resulting sensory disturbances.

b. A lesion of two roots is not ordinarily necessary to determine a motor paralysis. In some cases lesion of one root is sufficient. The motor arrangement of the roots shows many individual variations.

3rd, as to *sensory paralyses*:

a. Sensory paralyses may arise in all cases due to an intra-spinal lesion (before the exit and the junction of the roots) of the posterior roots.

b. Lesion of the three roots may not suffice, and lesion of one root may be enough to create sensory disturbance. Individual variations are much more numerous in the distribution of the sensory roots than in that of the motor roots.

c. Substitution of a healthy root for a diseased one is not always absolute. Limited areas of anæsthesia may be a sequence of lesion of one root, in spite of the integrity of other roots which are distributed over the same territory.

4th, as to *diagnosis*:

a. Paralyzes of the root type are characterized by the localization of the disease in one particular group and by the disposition of the strip of anæsthesia. Paralyzes of the terminal type are characterized by the localization in the exact territory of one or more peripheral nerves.

b. Hysteria is especially to be recognized by the mode of distribution of the sensory abnormalities.

c. Paralyzes of the peripheral nerves may stimulate those of the root type when several nerves are affected simultaneously, or when the symptoms extend to the territory of neighboring nerves.

A New Symptom of Epilepsy. (Ueber ein neues Symptom der Epilepsie).
CARLO CENI. *Centralblatt für Nervenheilkunde und Psychiatrie*, October, 1900.

In the course of some special observations the author noted that numerous epileptics presented a transitory lowering of the body temperature at different times of the day and night the thermometer not infrequently registering as low as thirty-six, thirty-five, and even thirty-four degrees, Centigrade, and remaining at this point for a period varying from half an hour to an hour. This condition of hypothermia was noted in twelve of twenty-four cases of epilepsy, and presented all the characteristics of an epileptic crisis, without involving the consciousness of the patient. In some cases the phenomenon was observed three or four or more times in the twenty-four hours, but usually it appeared periodically at intervals of a few days or a few weeks, sometimes during the day and sometimes at night. The symptom itself and the frequency of its occurrence did not stand in any relation to the severity of the disease; nor was there any constant relation of the time of its manifestation with other epileptic symptoms. Occasionally the hypothermia was noticed to occur one or two hours before a convulsive seizure.

The author suggests the vaso-motor relations of this variation in temperature, and believes that it affords additional evidence of the auto-toxic nature of epilepsy. It follows the rule established by experiments upon animals, in which hypothermia has been observed to follow the injection of blood from epileptic patients.

OPHTHALMOLOGY

Edited by C. M. Culver, M. D.

The Toxic Action of Illuminating-Gas Upon the Eye. (Ueber die Einwirkung von Leuchtgas-Vergiftung auf das Seh-Organ.)

DR. PURTSCHER. *Centralblatt fuer Praktische Augenheilkunde*, August, 1900.

The literature of the subject is here reviewed, and the author reports a case of his own. Of the twenty cases, of poisoning from illuminating-gas and carbon dioxid, that were not fatal and were examined, only thirteen are utilized in this article, because they are the ones in which the phenomena observed related especially to the eye. Only four of them con-

cerned illuminating-gas as the toxic agent. The ocular symptoms observed were exophthalmos, strabismus (paralysis of the extrinsic, ocular muscles), paralysis of the accommodation in one case, myosis in four, and mydriasis in two cases. The paradoxical pupillary phenomena observed indicate varying cerebral conditions, as in chloroform narcosis. Most marked among the toxic effects on the eye were depreciation of central vision, peripheral diminution of the field and disturbances of the ocular musculature.

The case reported by the author is that of a clergyman, sixty years of age, who had written letters till midnight, in his room in a Vienna hotel, had left orders that he be roused at four o'clock the next morning, and had unwittingly turned the gas partly on, after having turned it off, before going to bed. The would-be rouser, on seeking to obey orders at the time specified, found the guest unconscious. Several physicians worked all day to restore him. For the next ten days he was totally blind. Six weeks later he could walk about as well as ever and see one-fourth as much as usual; his memory was untrustworthy, his speech and motions were evidently slow, his eyes appeared normal, as seen externally, though the pupils were slightly, abnormally dilated and glasses did not augment his acuteness of vision. Two months later his acuteness of vision had become seventy-five per cent. of the normal, but was vacillating. Ophthalmoscopic examination then showed the fundi to be nearly normal; the arteries were slightly tortuous and the veins somewhat contracted. Five months after the poisoning the fields of vision were still restricted bi-laterally and downward, though they were normal upward, which general shape of the fields had been constant after the accident. His visual acuteness had become about normal. The case was one of double, lateral, homonymous hemianopsia, complete on the left side, incomplete on the right. It seems fair to assume, as cause of the ocular disturbances, hæmorrhages, or, perhaps, areas of softening, in the visual radiations—or even in the cortex itself.

In the cases in which the visual organs had specially suffered from the toxic effect of breathing illuminating gas, diminution of the power of vision, lasting seventeen days, is once mentioned. In three cases the pupils were contracted, in one they were of medium size, and in one they were dilated. Of general symptoms, mania, of three days' duration, is once mentioned, delirium once and respiratory disturbance twice. In one case, each, there were headache and amnesia, remnant dulness of consciousness, limitation of intelligence years afterward, hyperæsthesia and contraction of the muscles of mastication. Adding the case reported by Dr. Purtscher in this article, we have the new symptom, bilateral hemianopsia with a weakness of intelligence and of memory of places.

Tuberculosis of the Iris and Ciliary Body. (Tubeculose de l'iris et du corps ciliaire.)

M. PECHIN. *Le Progrès Médical*, No. 12, 1900.

The author remarks the neglect of ocular tuberculosis until recent years. This was excused before 1851, because the ophthalmoscope, with which to

examine tubercular lesions of the fundus, had not yet been invented. He inquires why, however, tubercles of the anterior parts of the uveal tract had also escaped observation and description. He reviews the pertinent part of Demarres's work, published in 1847, and assumes to diagnosticate as tuberculous some of the trying cases described by Demarres, but not properly classed. Galezowski, in his work on eye diseases, published in 1875, had made the same corrections of Desmarres, citing, at the same time, the celebrated observation of Gradenigo, of Venice, of a case that he began to watch, clinically, in 1868. After that period, however, observations became progressively more numerous, and clinical description strenuously brings out the characteristics of the disease. The patient is studied more with reference to concomitant tuberculous affections and the quest is to decide if the infection be primary or secondary. Continued observation of patients permits the recognition of two distinct forms, one slight and the other grave, suppurative and destructive; to these must be added a glaucomatous and certain other, rare forms without granulomata of the iris. Such studies have been completed by bacteriologic examinations and inoculations. Tuberculosis of the iris is a disease of infancy and youth. The author cites one case in a child a year old, another in a person fifty-one years old. The rarity of the disease is partly due to the fact that its existence has been relatively ignored by the statisticians. Horner gives its occurrence as one in four thousand cases, Hirschberg as six in sixty thousand, which are certainly too low percentages. Usually only one eye is affected, though both of a pair may be; in the latter case the infection is deeper and the granulations have more or less invaded the uveal tract in its anterior part as well as in its posterior.

The pathogenesis of the ocular infection has been much discussed and it ought to be recognized that the question is a delicate one. Some have ascribed the local inoculation, in healthy persons, to a scratching of the conjunctival mucus membrane, to ulcers arising from scrofulous lesions (Burnett), and to small, sharp, foreign bodies that wound the conjunctiva and infect it (Fuchs). In any case, if this primary infection of the conjunctiva is possible, it has not been proved that the sclerotic and cornea can adequately oppose the passage of the infectious element into the uveal tract. Many cases of this kind have been reported, but have been under observation a long time before any other tuberculous symptoms were manifest. Hence the difficulty of judging as to the chronicity of the ocular tuberculosis. The discussion of this subject is protracted. It is not concluded in an accessible issue of the *Progrès*, hence the author's conclusions are yet wanting.

Symmetrical Angio-megaly of the Upper Lids. (Angio-megalie symétrique des paupières supérieures.)

ROHMER. *Archives d'Ophtalmologie*, August, 1900.

The author records, in this article, four cases of the affection named by its title. Something resembling this disease had been described formerly by von Ammon, Sichel and Mackenzie. In later years one case of it has been reported by each of the three authors, Fuchs, Fehr and Schmidt-

Rimpler. The article says that the bibliography of the subject, so far as the author knows, is comprised by the reports of the three cases last mentioned and the one reported by him in this paper. The disease consists in an increase of the volume of the entire length of the skin of the upper lids. The superfluous skin which is folded, flaccid and slightly red, hangs over and obscures the free edge of the eyelid, sometimes obstructs vision, as the lid itself does in cases of ptosis. The power of the muscles of the eyelid is not affected, but when the levator palpebrae contracts the free edge of the tarsus is drawn up behind the flaccid, pendant skin. There is no appearance of swelling or of a new growth, or of a fluid behind the excessive cutaneous fold, but merely a superfluity of it. It is possible to pick up the skin in a large fold, in which case it feels thin and as if there were an empty space behind it. The condition progresses to a certain stage and then becomes stationary. In the case reported in this article, no change had taken place in a number of years. A noticeable feature was the temporary swelling and increased vascularity of the lids during emotional excitement.

In one case, that of a young girl, a fit of crying greatly enlarged the lids and made them very red. This symptom, which Rohmer ascribed to a vascular origin, does not seem to have been noticed by the other observers of such cases. In all the reported cases the patients have been females, and the affection appeared in childhood or early adolescence. The cause is unknown.

In one instance a similar condition had existed in the patient's mother. The pathogenesis of the affection is obscure. Fuchs and Fehr thought that recurrent attacks of œdema of the lids led to distension of the skin, which subsequently became atrophic. Schmidt-Rimpler assumed a hernia of the orbital fat through the orbicularis and subjacent aponeurosis. Rohmer thinks the best explanation is that of the developmental and functional anomaly of the vascular system of the lids, which results in trophic changes in the skin. He details his reasons for differing in opinion from previous writers, because of his views as to its pathogenesis, and proposes the name symmetrical angio-megaly.

Treatment consists in free removal of redundant skin. If, on cutting the skin, the orbital fat presents, it should be removed as much as necessary. Microscopic examination of excised portions of the skin have been made by the author, Fehr and Schmidt-Rimpler. The last named found no apparent change. Fehr made sections of the skin of normal eyelids prepared in the same way. He found that the skin of his patient's lid showed notable atrophy of all its layers. Rohmer examined parts of the skin removed from two of his patients. In one he found a dilatation and overgrowth of lymphatics, parts of large arterial and venous channels filled with blood. These vessels were in the skin and sub-cutaneous tissue. Their abnormality was not so much in their number as in their calibre. Aside from this the skin was not changed, except as being reduced in thickness. In the other specimen, Rohmer found a dilated condition of arteries and veins, but no evident change of the lymphatics. No unusual amount of elastic tissue was present.

LARYNGOLOGY AND RHINOLOGY

Edited by C. F. Theisen, M. D.

Contributions to the Diagnosis and Treatment of Chronic Laryngitis.
 (Beiträge zur Diagnose und Therapie des chronischen Kehlkopf-
 katarrhes.)

EMIL ZIFFER. *Wiener medicinische Wochenschrift*, No. 28, 1900.

The author mentions the necessity of making a thorough physical examination, particularly of the lungs, in those cases in which the laryngeal examination shows the presence of partial hypertrophies and nodular formations. It must be remembered that in idiopathic laryngeal catarrh, the upper surface of the epithelium of the mucous membrane should be intact, so that when a laryngeal examination is made, even though there is a swelling of the ventricular bands interfering with the movements of the cords, and a thickening of the inter-arytenoid fold, as long as no distinct ulceration can be discovered, we are not justified in diagnosing anything but an old laryngitis. A thickening of the ary-epiglottic fold and the epiglottis, according to Lewin, is usually found in ministers, actors and singers. These conditions of the parts help to give the voice a deep resonant quality. But as these tones can only be produced by strong contraction of the muscles of the ary-epiglottic ligaments, the ary-epiglottic folds finally become hypertrophic as a result of the constant use of these muscles. The anatomical structure and shape of the larynx have a certain influence in the kind and extension of laryngeal catarrh, *i. e.*, a person with a larynx with a sufficiently large lumen, and normally placed, will not have as much laryngitis, and *lighter* attacks when he has them. There are, however, even in a normal larynx, certain points, each being a *locus minoris resistentiæ*, which are peculiarly subject to inflammatory changes. This accounts for the different degrees of redness of the mucosa, in larynges that have been subject to many attacks of laryngitis. As a rule, only in cases of laryngitis that have continued for many years, so that the mucous membrane is very much thickened, is it of a uniform color. The appearance is often suspicious of beginning specific or tubercular trouble, and should not be mistaken for simple idiopathic laryngitis. The author is of the opinion that such conditions as hypertrophy of the laryngeal mucosa, pachydermia laryngis, and even idiopathic laryngitis, are due to pathogenic micro-organisms. In considering the treatment, he states that the nodes occurring on the cords in cases of chronic laryngitis, and caused by forced use of the voice in talking and singing, will frequently disappear without any operative procedure. Simple local treatment and proper rest of the voice will often suffice. Much can be done for cases of not too long duration, provided the patient will take proper care of himself, but in the majority of the cases there is a tendency to recurrence. For cases that have been going on for many years, a very energetic local treatment must be used, and the patient must avoid straining the voice for several months after the conclusion of treatment. Patient should speak in a whisper during the entire time. The use of inhalations is recommended, and astringent dusting powders, such as tannin for the inflamed laryngeal

mucous membrane, and alum when the cords are involved. Author got the best results with strong solutions of silver nitrate, particularly when there were superficial erosions. The use of sponges and brushes for local applications is condemned, because antiseptic precautions can not be observed with their use.

Some Remarks on the Etiology of Retropharyngeal Abscess, with Report of Cases.

M. R. WARD. *Laryngoscope*, September, 1900.

Two cases are reported by the author, one occurring in a child two and a half years old, the other in a child of six months. The abscesses in both cases were opened from within the mouth, and the patients made good recoveries. Bokai has studied the disease more thoroughly than any one else as it occurs in early life. Two hundred and four cases occurring during a twenty-six years' service at the Children's Hospital, at Pesth, are reported by him. The author gives Bokai's classification, which is of interest from an etiological standpoint: idiopathic cases, 179; scarlet fever, 9; measles, 1; caries of the vertebra, 7; abscess of neck, 7; traumatism, 1. Retropharyngeal abscess in adult life is much less frequent, and involves the cellular tissues of the pharynx. It may be due to traumatism, caries of the vertebra, burrowing of pus, or infective processes of metastatic origin, and does not differ from the abscess formation in other parts of the body. In infancy, the writer believes the deep cervical glands are usually at fault. The strumous habit figures as an etiological factor, but it occurs as well in children presenting the appearances of perfect health. In these cases, it must be accounted for by some inflammatory or infective process in the neighborhood of the affected glands. The micro-organisms enter through the lymph spaces, the mucous membrane of the naso-pharynx, and the tonsils. In children who have constantly recurring attacks of nasopharyngitis, an acute adenitis sometimes results, terminating either in resolution or suppuration. Both the writer's cases were accompanied by an acute nasopharyngitis, which he considered the chief cause of the pharyngeal abscess.

How to do the saucer-like depressions in the Middle of the Pachydermatous Masses on the Processus Vocalis Originate? (Wie entstehen die Schalenformigen Vertiefungen in Mitten der pachydermatischen Wülste am Processus vocalis?)

A. KUTTNER. *Fraenkel's Archiv für Laryngologie*, Bd. 9, Heft 3, S. 350.

According to Virchow, the firm adhesion of the mucous membrane to the cartilage is the cause of the depressions in the centre of the pachydermatous masses. B. Fränkel, on the other hand, is of the opinion that they are caused by the pressure of the one thickened vocal cord on the other during phonation. In proof of this, he states that when the pachydermatous thickening only exists on the one cord, there is no depression, and when present on both, the thickening on the one cord fits into the depres-

sion on the other. The author reports a case which he considered would prove Virchow's theory to be the right one. In his case the left vocal cord was higher than the right, so that the thickened ends could not come together accurately.

A Difficult Case for the Use of the Œsophagoscope. (Ein schwieriger œsophagoskopischer Fall.)

G. KILLIAN. *Deutsche medicinische Wochenschrift*, December 20, 1900.

The author reports a most interesting case of a woman fifty-two years of age, who, while eating, swallowed a tooth-plate. This was made of gutta percha, with two lateral projections, and had a tooth in the centre. After the accident, the patient was unable to swallow solid food, and as a result was in very bad general condition when the author was consulted. The pharynx and upper part of the œsophagus were thoroughly cocainized, and an œsophagoscope, nine millimetres in diameter, was passed. It came in contact with a foreign body at a distance of from thirty-three to thirty-five centimetres from the middle of the superior maxilla. After particles of food had been drawn out of the œsophagus with a pump, the plate could be clearly seen. Attempts were made to extract it with a long forceps, but were unsuccessful, because the œsophageal mucous membrane had so tightly enclosed it. The author then experimented with similar plates obtained from a dentist, and it was found that they could be easily burned through with the cautery knife or snare. An œsophagoscope of larger diameter, thirteen millimetres, and forty-two centimetres long, was passed, and with a specially constructed cautery snare the plate could be finally removed. The plate could easily be cut through with the hot wire loop, and was taken out in three sections. This was followed by very little reaction, patient only complaining of slight pain in swallowing on the following day. She was able to take her meals regularly, immediately after the operation, and gained very quickly.

The Question of Chorea Laryngis. (Die Frage der Chorea Laryngis.)

A. ONODI. *Frankel's Archiv für Laryngologie*, Bd. X, S. 32.

The author advises in his article that the name chorea laryngis be dropped, as it only leads to errors and much confusion. In cases of choreatic movements of the vocal cords, occurring without a general chorea minor, he recommends that the expression "choreiform movements" of the vocal cords should be used. Cases of nervous cough, which are followed by chorea minor, he designates as chorea minor with nervous cough. Chorea minor runs its course more frequently without a nervous cough. This term can not be applied, however, to many of the cases of nervous and reflex cough, called chorea laryngis by many authors. The author only acknowledges the occurrence of a laryngeal chorea, in cases in which, with the laryngeal mirror, movements of the vocal cords can be determined. But these appear together with a true general chorea minor.

PAEDIATRICS

Edited by Henry L. K. Shaw, M. D.

On the Existence of Ductus Murmurs in the Newly Born. (Ueber das Vorkomen von Ductusgeräuschen bei Neugeborenen.)

THEODOR ESCHERICH, *Jacobi Festschrift, 1900.*

The author describes a case of an infant with rapid, superficial respirations, marked cyanosis and blueness of the skin. The heart dullness was slightly enlarged and there was a loud systolic murmur heard best at the base of the heart but distinct at all points of the chest wall. The second tone was clear and there was no marked accentuation of the second pulmonic tone. A diagnosis of congenital heart disease was made. The autopsy showed that the heart and valves were perfectly normal. The foramen ovale was closed but the ductus arteriosus was widely open. The murmur heard intra vitam was undoubtedly due to the stream of blood passing through this passage. There was no bruit heard in this case before delivery and the foetal heart tones were clear.

Escherich has had a number of weak and premature infants under observation. A frequent condition he has noticed has been weak superficial respiration. These cases have characteristic attacks of complete cessation of respiration with deep cyanosis. These attacks are infrequent at first, but as the child grows weaker occur oftener and the child generally dies during one. The attacks may last several minutes and are somewhat similar to the Cheyne-Stokes type of respiration. They come out of them spontaneously or after the application of irritants or artificial respiration. In these cases he has observed a distinct systolic murmur in the pulmonic region. This was absent during respiration and in the beginning of the attack, but was very distinct at the height of the asphyxia. With the return of respiration it disappeared. This murmur he believes is due to an open ductus Botalli. The pressure in the pulmonary artery is increased when the respiration stops and there is a sinking of the general arterial pressure and this difference of pressure between the pulmonary artery and the aorta causes the flow of blood through the ductus Botalli with the formation of a murmur. The pressure returns to the normal when the respiration is again established.

The treatment recommended in these cases is to stimulate the respiration by Schultze's method several times a day.

On the Normal Great Toe Reflex in Children. (Ueber den normalen Grosszehenreflex bei Kindern.)

FRITZ PASSINI. *Wiener klinische Wochenschrift. No. 41, 1900*

The "toe phenomenon" first described by Babinski two years ago has attracted much attention and has been verified by well known neurologists.

Passini found it present in older children with cerebral palsies, congenital hydrocephalus with spastic paresis of the lower extremities and in spinal diseases such as compression paralysis from caries of the vertebra. In tubercular meningitis he found it had a prognostic value as in a number of cases the flexion turned into extension one or two days before death. Babinski called attention to the fact that there was normally an extension

of the toes on plantar irritation in infants which changed to the normal flexion type of the adult when the child began to walk. The author made a number of investigations and found that the flexion type of the great toe reflex normally appears in the fourth quarter of the first year. The use of the feet in walking does not produce the reflex, but it is dependent upon the development of the pyramidal tracts. Pathological changes in the pyramidal tract in older children and adults cause a return to the infantile form of the plantar reflex.

Artificial Feeding of Infants with Milk and Whey. (Die künstliche Ernährung der Säuglinge mit Milch und Molke.)

MONTI. *Die medicinische Woche, September 17, 1900.*

Monti has claimed for some years that the feeding of infants with milk and whey most nearly approaches the natural nourishment and is founded on scientific principles.

Whey prepared from fresh cow's milk should be alkaline and contain from eight tenths to one per cent of lactalbumin, three hundredths per cent of casein and about one per cent fat. This whey is added to pure whole milk in proportions of two parts whey and one part milk for infants under six weeks and equal parts of whey and milk until the infant is seven or eight months old. The mixture is heated to sixty degrees centigrade for ten minutes, carbonate of soda added and placed on ice until ready for use. Monti claims from experiments in his laboratory that the acidity of this mixture is nearly the same as in breast milk and that the casein is precipitated more slowly and in finer flakes than in any other form of artificial feeding. On account of the larger percentage of lactalbumin it very closely simulates human milk and can more readily be digested. Lactalbumin is directly absorbed from the intestinal tract of infants while the casein has to be acted upon by the stomach ferments and go through a number of changes until it is converted into peptone.

He finds that young infants take this food well and that digestive disorders are rare. He finds, however, that they do not gain in weight at first as rapidly as breast babies on account of the lower percentage of casein and lactalbumin, but that the increase in the later months is greater. The percentage of sugar in these mixtures is very nearly that of breast milk, so that it is unnecessary to add artificial sugar preparations. The salts are present in slightly larger quantities but that does not seem to have any injurious effects.

Monti has long been an advocate of pasteurization and protests against sterilization because the long cooking precipitates the lactalbumin and alters the chemical composition of the milk. The sugar is oxidized and gives a caramel taste to the milk. The casein is so changed that it coagulates into coarser flakes. The fine emulsion of the milk globules is disturbed and fatty acids are liberated which cause an unpleasant taste in the milk. The salts come out in a more insoluble form.

Children who have acute or chronic enteritis from using other methods are able to digest and thrive upon the whey mixtures. Rachitis and anæmia will not appear if the food is properly prepared and administered.

CLINICAL PATHOLOGY.

Edited by George Blumer, M. D.

*Phagocytosis in Dysentery. (La phagocytose dans la dysenterie.)*CH. DOPTER. *Annales de l'institut Pasteur, Tome XIV, No. 12.*

In a suggestive article on this subject, Dopter relates his experiences in the examination of the stools in cases of dysentery, due to the colon bacillus. In a general way his results may be said to be as follows:

In benign cases of dysentery an examination of the dejecta shows from the beginning that large numbers of bacteria are situated in leucocytes, whilst very few are found between the cells. In severe cases, on the other hand, there is very often not only an infection with the colon bacillus, but also a secondary affection with some of the pus cocci. The bacteria at the beginning are almost all free, whilst, as soon as convalescence is established, large numbers of bacteria are found in the leucocytes. The author found that in cases of collapse, where large quantities of salt solutions were injected into the patient as a stimulant, that this led to a marked phagocytic action of the leucocytes in the stools. Before the injection, during the algid stage, the bacteria in the dejecta are almost entirely free, but a short time after the disappearance of the fever, which generally accompanies the injection of the serum, large numbers of bacteria were found to be present in the leucocytes.

The author concludes that in dysentery, as in other infectious diseases, phagocytosis is the method of defense of the organism. He thinks that the examination of the stools for phagocytosis may be of service from a prognostic standpoint.

*Lumbar Puncture. (La ponction lombaire.)*CHAS. LEVI-SIRUGUE. *Gazette des hopitaux civils et militaires, 73rd year, No. III.*

The author in this paper gives a complete résumé of the literature of lumbar puncture from its origin, ten years ago, up to the present time. He discusses the question from the point of view of the technique of the procedure, and also as regards its value as a diagnostic, prognostic and therapeutic agent.

He describes the original method of procedure described by Quinke—the patient lying in a lateral position with the back markedly curved, and puncture being made in the fourth lumbar interspace. He states that at the present time many writers prefer the lumbo-sacral method of Chipault, especially in adults. He states that most authors agree as to the facility with which the operation is done, except in restive children, or extremely nervous adults. He refers to the usually harmless character of the procedure, but states that Gumprecht has recently collected fifteen cases in which sudden death had occurred several hours after the puncture. In most of these cases death was due to respiratory paralysis, and almost all of them were cases of cerebral tumor situated posteriorly.

The author then reviews the literature bearing upon the diagnostic value of lumbar puncture. He states that the procedure is of no very great value in the diagnosis of hydrocephalus and cerebral tumors, although in the latter there may be an increase in the amount of albumen

and sugar in the fluid withdrawn. Its greatest diagnostic value is in cases of acute meningitis, and here it affords not only diagnostic but also prognostic indications. In tubercular meningitis, the experience of various authors differs very considerably, particularly with regard to the finding of tubercle bacilli in the fluid. Heubner and Monti consider that the procedure is of little value in tubercular meningitis, as the tubercle bacillus is so frequently absent, but Braun and other observers have found the tubercle bacillus in from sixty to ninety per cent. of the cases examined for it. Animal inoculation has been resorted to in some cases with success, but unfortunately some weeks must elapse between the inoculation and a positive result, and meanwhile the patient may have died.

Regarding the therapeutic value of the proceeding, most authors seem to regard it as of very doubtful value. In some cases, however, beneficial effects seem to have been produced. Thus, Bozzolo has seen beneficial results in three cases of Sydenham's chorea, and Leyden has observed good effects in hydrocephalus following repeated punctures, with the withdrawal of small quantities of fluid each time.

New Researches on Small-pox. (Nouvelles recherches sur la variole.)
ROGER AND WEIL. *Gazete des hopitaux civils et militaires*, 73rd year, No.

132.

The authors of this article have recently made a series of experiments regarding the transmittibility of small-pox to the lower animals, and also regarding the bacteriology of the disease. The animals employed were rabbits. The inoculations were made into the anterior chamber of the eye as a rule, though sometimes they were made subcutaneously or intravenously. Whilst these different processes did not produce a disease like small-pox in man, they, nevertheless, caused the death of the animal from an infectious process, which presented certain similarities to human small-pox. The most important of these consisted in the blood changes which were similar to those seen in man, and certain changes in the bone marrow, which were also similar to those occurring in the bone marrow of human beings. Intraocular inoculation of vaccinal lymph in the rabbit also produced death with changes similar to those seen after inoculation from small-pox pustules.

Regarding the bacteriology of small-pox, the authors state that besides leucocytes, the contents of the small-pox pustules always contain numerous rounded or oval bodies which stain very strongly with the ordinary coloring matters. They also found these bodies in the blood, though they were more difficult to find here, except in severe cases. In the blood they found the bodies had a little border of protoplasm. The bodies were also found in the sanguinolent effusions of hæmorrhagic small-pox, and at autopsies in the different organs, especially in the spleen and the bone marrow. In two autopsies on pregnant women, the bodies were found in the amniotic fluid, and here they seemed to be motile. The authors also found the same bodies in animals inoculated with small-pox. They were able to cultivate them artificially in rabbit's blood, and at the time of their report had grown them as far as the eighteenth generation without any loss of virulence. The authors conclude that these bodies are probably the cause of the disease, and that they, in all probability, belong to the sporozoa.

ALBANY MEDICAL ANNALS

Original Communications

THE DIAGNOSIS OF CANCER OF THE STOMACH.*

BY ANDREW MACFARLANE, M. D.,

Adjunct Professor of Physical Diagnosis, Albany Medical College.

It is only a few years ago that the value of the diagnosis of cancer of the stomach was purely academic and was of no practical use. It held out no hope to the patient and took away from the physician by its very hopelessness every stimulus to effort. To-day, however, surgery has made such marvellous advances that the operator no longer hesitates to change the course of the gastro-intestinal current or even to remove entirely the diseased organ. The need now is that medicine should keep abreast with surgery and that the physician should do his part in recognizing for the surgeon at the earliest possible moment the presence of this dread disease.

In the beginning it should be kept in mind that no symptom or sign has as yet been discovered which is absolutely pathognomonic of cancer of the stomach and that the diagnosis, if made at all, must rest upon the totality of the symptoms which have been laboriously obtained and carefully scrutinized. The effort in the past to discover the one specific symptom and the pursuit of this *ignis fatuus* have oftentimes led to unscientific conclusions and to dire results. Then too, a hardly less grievous error, cancer of the stomach has too frequently been considered under all circumstances the same pathological entity capable of producing the

*Read before the Medical Society of the County of Albany, February 13, 1901.

same morbid results. Marked differences in symptoms were thus left unexplained and the entire condition became apparently shrouded in contradictions as well as uncertainty.

A very brief consideration of the anatomy and physiology of the stomach will quickly explain the causes of these differences. The stomach is the dilated sac-like portion of the digestive tract which, after dissolving and reducing the food, absorbs some of it and expels the remainder into the duodenum. It extends from the sixth or seventh rib in the left mammary line to about one inch above the umbilicus. The entrance is called the cardia or cardiac orifice and the place of exit the pylorus or pyloric orifice.

It has been found that cancer invades the different parts of the stomach in differing degrees of frequency—the pylorus in 51 per cent., the cardia in 9 per cent., the lesser curvature in 16 per cent., the greater in 7 per cent., the body in its different proportions in 17 per cent.

The degree and extent of interference with the functions of the stomach and the resulting symptoms will depend upon the part of the stomach affected. The symptoms can therefore be classified for clinical purposes as constitutional and mechanical and the former may be subdivided into general and local.

The general constitutional symptoms are the nutritive disturbances, progressive loss of weight and strength, the cachexia, the anemia and the enlarged glands. The local disturbances are the loss of appetite, the absence of hydrochloric acid, the presence of lactic acid, the interference with absorption and the hæmatemesis. The mechanical are the dilatation, the disturbances in motility, the vomiting, the peristaltic and antiperistaltic movements and the great thirst.

The general constitutional symptoms are not at all pathognomonic of malignant disease of the stomach, but are characteristic of cancerous growths in all regions; the local vary in a measure with the extent of the carcinomatous process in the stomach and the mechanical depend upon the position of the new growth in the stomach. The constitutional symptoms are probably all due to the absorption of the toxins of the carcinoma and their direct effect upon the constitution and especially upon the stomach itself. The loss of appetite and absence of hydrochloric acid are thus the expression of a catarrhal condition of the stomach due to the cancerous growth and its toxins. Where the cancer has

developed upon the base of ulcer and as a result of that or some other condition is limited in its extent, in such cases hydrochloric acid is not usually absent. Lactic acid is found where the absence of free hydrochloric acid, motor insufficiency and the impairment of the albumenoid digestion are combined and therefore in a condition where disturbances of motility and of albumenoid digestion have been added to the gastritis. The hemorrhage characteristic of cancer has the coffee-ground appearance. It is usually small in quantity, in contradistinction to the large hemorrhages of ulcer, and is due to the erosion of the tissue with the resulting capillary hemorrhage.

The mechanical signs are the result of obstruction at the pylorus or at the cardia. If the lesion is at the pylorus there is an obstruction to the passage of food into the duodenum causing retention of the gastric contents and dilatation of the stomach. When the retention becomes marked the patient relieves himself by vomiting. The thirst is due to the interference with the passage of water into the intestines whence it is absorbed. The peristaltic movements are induced by the hypertrophy of the gastric muscles in their effort to overcome the obstruction. These mechanical symptoms are not at all pathognomonic of cancer and may all be due to a non-malignant change of structure at the pylorus.

In cancer of the pylorus the constitutional symptoms are present and the mechanical symptoms are especially marked. The obstruction at the pylorus causes dilatation and retention with vomiting, thirst, peristaltic movements and pain.

If the cancer is at the cardia, a feeling of pressure above the gastric region, great difficulty in swallowing solid food, tendency to vomit immediately upon swallowing food and tenderness on percussion over the xyphoid cartilage with obstruction to the passage of the stomach tube make evident the mechanical obstruction. The emaciation is marked, due to the difficulty in the ingestion of food, while the characteristic cachexia is at times not so intense, as the process is often limited in its extent. The vomiting is usually directly after taking food which is unchanged or simply enveloped in œsophageal mucus. There are no dilatation of the stomach, not much belching and no peristalsis.

In cancer of the lesser curvature, when the pylorus is not involved, and in cancer of the body the constitutional symptoms

are present; cachexia, emaciation, absence of hydrochloric acid, interference with resorption and possibly hæmatemesis. Lactic acid may be found provided there is stagnation due to atonic dilatation combined with the absence of hydrochloric acid and diminution in the digestion of albumenoids. The mechanical symptoms are not evident except at the terminal stage.

Nothing has thus far been said of the tumor for the reason that our constant effort should be to make a highly probable diagnosis before a tumor is palpable, as an appreciable tumor indicates that the time for operative interference has passed.

Czerny and Rindfleisch state that gastric cancer cannot be radically operated upon when it can be certainly determined as a tumor.

Kraske says it is desirable to operate in pyloric carcinoma before it can be felt as a tumor and before it can be certainly diagnosed. This is probably true of radical operative procedures, but not of those undertaken for the relief of distressing symptoms. A tumor must be of some size and favorably placed on the curvatures or at the pylorus to be palpable. When they are diffuse, flat, covered by the liver, on the posterior wall or at the cardia they cannot be felt. The presence of ascites, of meteorism, of abdominal fat and of contracted abdominal muscles make palpation difficult.

The motility of the tumor is of great diagnostic importance. It is affected by (1) the respiratory movements of the diaphragm; (2) peristaltic movements in the stomach itself; (3) external pressure; (4) internal pressure.

Tumors of the curvatures are affected most markedly by the respiratory movement of the diaphragm, those of the pylorus unless adherent to the liver are less affected. When this motion is absent it may be due to total dislocation of the stomach downwards, to the slight motion of the diaphragm, the result of adhesions or of fluid or gas in the pleural cavity or to the adhesion of the tumor itself to the abdominal wall. Peristaltic movements may cause a tumor to disappear and the degree of fullness and contraction of the stomach has a marked effect in changing the position of a tumor. Marked dilatation may draw a tumor down with it. The greatest passive motility is seen in tumors of the pyloric orifice and at times in tumors of the fundus. Absence of this passive motility indicates an adhesion to the abdominal wall.

When the tumor is adherent to the liver it descends on deep inspiration but cannot be held back on expiration. When it is adherent to the pancreas it is immovable by dilatation. Pressure usually causes slight pain. Severe pain indicates inflammatory swelling or perigastric adhesions. Artificial dilatation of the stomach with a gas, either air or CO_2 , causes tumors of the pylorus to go to the right either up or down, tumors of the lesser curvature to turn backwards and at times to disappear.

The microscope furnishes us little decided aid. Tumor particles exhibiting the specific cancer cells have been found but so rarely as to make the discovery a lucky chance. The endeavor to secure particles of a tumor by means of a rubber curette seems to me positively dangerous. For the early diagnosis they are usually of no great value as the tumor must have reached the stage of ulceration before particles are thrown off. The long Boas-Oppler bacilli accompany lactic acid and have the same significance. Sarcinæ indicate retention, but they are rarely found in carcinoma. Yeast cells which also indicate retention occur often though in small number in carcinoma.

Pain is rarely absent in carcinoma and is most common in cancer of the pylorus. It varies in intensity from a slight pressure and fullness to severe continuous or paroxysmal pain. It may continue until the stomach is emptied by vomiting, washing or the passage of the gastric contents into the intestines. In the beginning it may be simply a feeling of pressure. The pain is not so severe as in ulcer.

Beyond the age of 50 there is said to be a predisposition to cancer of the stomach—Brinton, Häberlin and Welch have found that three-fourths of the cases were beyond the fiftieth mile stone. Recent statistics, however, indicate that, together with the marked increased frequency of cancer, the age at which it develops is growing younger.

Lindner in the Augusta Hospital, Berlin, found that in 1898, 36 out of 66 cases of cancer of the stomach were under fifty, and Croner, at the Charité, found that in the same year 7 cases out of 75 were between thirty and forty. Statistics of the General Hospital, Vienna, for a number of years show that 14 patients were under thirty years of age.

As we begin to survey the array of symptoms, three at once force themselves upon our attention as of especial significance—

the absence of hydrochloric acid, the presence of lactic acid and the occurrence of motor disturbances.*

After the discovery by Van der Velden in 1879, of the association of the absence of hydrochloric acid with cancer of the stomach, the attempt was made, although the discoverer rightly appreciated its true significance, to make this symptom pathognomonic. But it was quickly learned that hydrochloric acid was absent in only from 87 per cent. to 92 per cent of the cases, and what was even more important, that this same symptom was found in such common diseases of the stomach as chronic catarrh, atrophy, neuroses and also in varied constitutional conditions.

In 1892 Boas stated the specific significance of the presence of lactic acid in the stomach, but this claim has since been modified and by the discoverer himself. Strauss found this acid in 91 per cent. of his cases, Rosenheim in 78 per cent., and Riegel in the majority of his cases. This, like hydrochloric acid, is found in other conditions than cancer of the stomach, as atrophy of the stomach with motor disturbance and cancer of the duodenum or of an adjacent organ, which causes obstruction to the passage of the stomach contents and secondary atrophy of the stomach. This sign is present where there is an absence of hydrochloric acid with the addition of motor insufficiency and incomplete albumenoid digestion. It therefore would not be found in any of the cases where hydrochloric acid was present. The cases outside of cancer of the stomach, however, in which lactic acid has been discovered, are very uncommon and to this extent it has the advantage of the preceding symptom.

The frequency of motor disturbance in cancer depends necessarily upon the location of the cancer. In cancer of the pylorus it would appear early due to direct obstruction, in carcinoma of the other parts it would be a later manifestation due simply to the gastric atony which would be part of the general weakness. Boas found in 64 per cent of his cases marked stagnation, and Croner in 78 per cent striking motor disturbance. When it is remembered that the disturbances of motility occur especially in those cases most suitable for operative interference then these figures become more significant. But motor disturbances are not due to malig-

*The writer has within the last sixteen months diagnosticated cancer of the pylorus in three cases where no tumor was palpable by these three symptoms—retention of food, absence of hydrochloric acid and presence of lactic acid. All three cases were suitable for operation.

nant tumors alone, but also to benign growths and to dilatation the result of lack of muscular tone. But benign growths and atonic dilatation sufficient to produce marked motor disturbances require surgical procedure even more than cancer because of the brilliant results which follow operation in these cases.

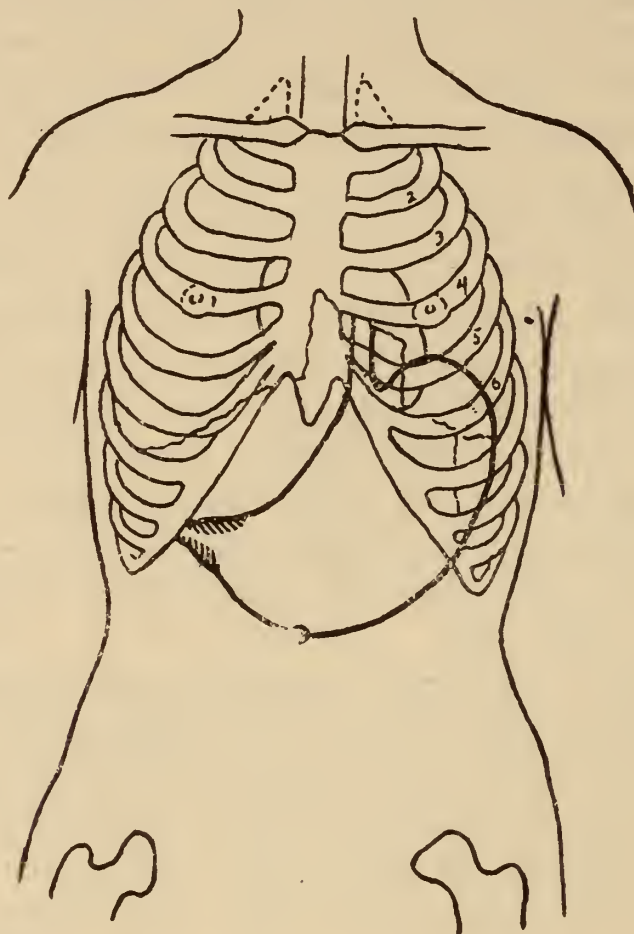
The question arises, How can the general practitioner who sees the case at its very inception make a probable diagnosis of malignancy? He may be unable in the hurry and multiplicity of general work to properly examine, chemically and microscopically, the stomach contents after a test meal, but he can easily determine disturbance in motility by finding food two hours after an Ewald test breakfast of a roll without butter and a pint of weak tea without milk and sugar, or six hours after a Riegel test meal of soup, bread, potatoes and meat. If the patient states that he has vomited food taken the day before, the passage of a stomach tube is not even necessary for a diagnosis. This, of course, does not prove that your patient has cancer of the stomach, but it does indicate that your patient has no simple "dyspepsia or indigestion" and should be given a complete and thorough examination if he is to receive the best results which modern scientific medicine holds out to him.

In conclusion I wish briefly to report four cases which illustrate the differential symptoms sought to be emphasized in this paper. They are cases of cancer, each affecting a different portion of the stomach: the pylorus, the cardia, the lesser curvature and the body. They all show the constitutional symptoms both general and local; the two cases in which there are contractures at either orifice have the mechanical symptoms well marked due to the obstruction, while the two in which obstruction is absent suffer from the mechanical symptoms to only a slight degree.

Carcinoma of the Pylorus—Tumor not palpable. E. B. B., æt. 70, male, married. Farmer and native of the United States. Admitted to the Albany Hospital July 24, 1900, and referred to Dr. Macdonald. Family history negative. Previous health had always been good up to a few months previous to his admission to the hospital. He was first troubled with "indigestion," and in March, 1900, he began to have severe pains localized in the epigastric region, nausea and vomiting of large quantities of food which was very sour. Vomiting occurred at any time during the day and night. No blood or coffee grounds noted in the vomitus. Patient's appetite began to fail, and he rapidly lost flesh. *Physical Examination:* Patient had been a strong, robust man. Some emaciation evident.

Skin and mucous membrane somewhat anæmic, but no cachexia apparent. Thorax and abdomen negative. Urine, acid, 1024. No albumin or sugar. No enlarged glands. Stomach contents after a test breakfast showed retention of large quantities of food. The total acidity was 40. Free hydrochloric acid was absent, but lactic acid was strongly positive. *Sarcinae*, yeast and Boas-Oppler bacilli were present. On distending the

TUMOR OF THE PYLORUS—NOT PALPABLE—(SCHEMATIC). E. B. B., ÆT. 70.



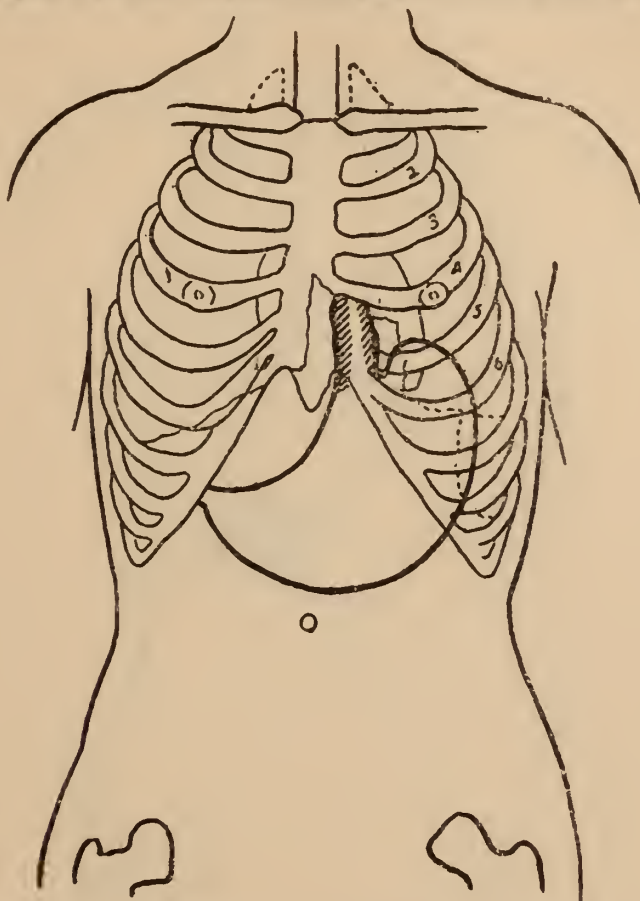
SYMPTOMS.—*Constitutional*: Emaciation, weakness, absence of hydrochloric acid.
Mechanical: Vomiting, pain, retention of food, presence of lactic acid.

stomach with gas, it was found to be dilated and to reach below the umbilicus. No tumor was palpable, although there was a resistance felt in the region of the pylorus. Operation showed a small tumor with no glandular involvement at the pylorus, secondary dilatation of the stomach.

Carcinoma of the Cardia. D. McC., æt. 60, widow. Native of Ireland. Patient was seen October, 1900, in consultation with Dr. J. F. Barker. Her family history was good, except that a sister died of a tumor of the stomach. She had always enjoyed good health until ten months previously, when she began to have trouble with her stomach, and became greatly constipated. Has had a sensation of burning and considerable pain behind the lower part of the sternum. Has vomited very often, and now vomits whenever she attempts to swallow solids. The food is immediately regurgitated unchanged and enveloped in mucus. Has never

noticed blood. Has lost forty pounds in weight, and is very weak. *Physical Examination:* Patient is much emaciated, very weak and cachectic in appearance. Lungs and heart are negative except that the respiratory and cardiac sounds are faint. Very sensitive to percussion over the sternum. Abdominal wall is very relaxed, and in spite of the ease of palpation, no tumor or enlarged glands discovered. Upon attempting to pass

TUMOR OF THE CARDIA (SCHEMATIC). D. MCC., ÆT. 60.



SYMPTOMS. — *Constitutional:* Marked emaciation, exhaustion, anæmia, cachexia.

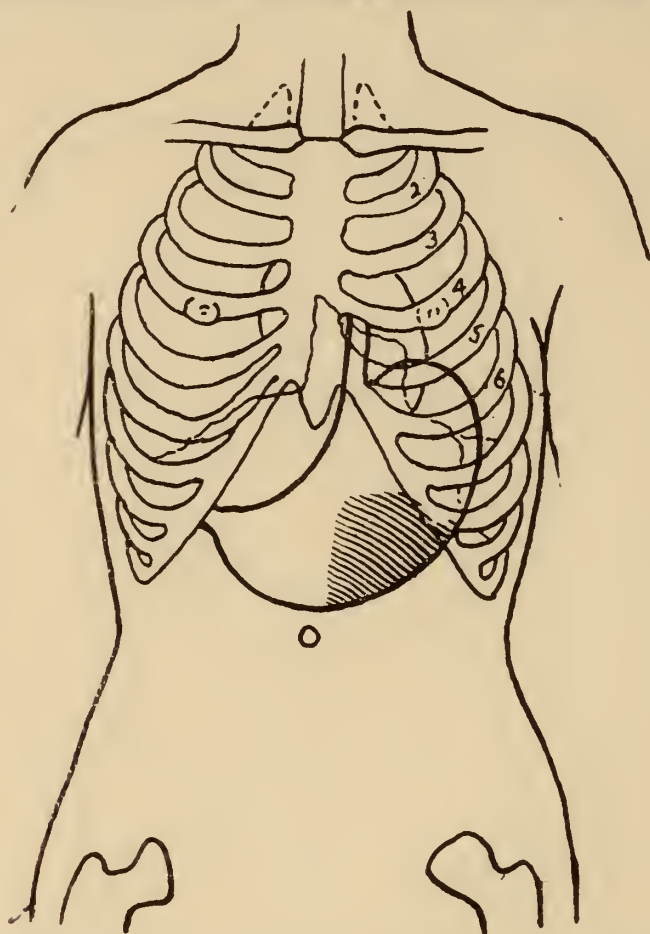
Mechanical: Vomiting, great difficulty in swallowing solids, tenderness over sternum.

a stomach tube, an obstruction is detected at the level of the cardia; an œsophageal bougie met with resistance at the same point. Rosenheim's treatment with olive oil and rectal enemata was recommended. Patient rapidly grew weaker, and died in a few months.

Carcinoma of the Body. A. J. W., æt. 60, male, married, boatman. Native of the United States. Father died at 57 from apoplexy, and mother at 50 from dropsy. A sister died at 48 with cancer of the uterus. Three brothers and one sister are living and well. Had always enjoyed good health until two years before entrance into the hospital, March, 1901, when he began to belch much gas and to have a feeling of pressure in the epigastric region. He had no pain, nausea or vomiting. Last summer his condition became worse, and since then he has been gradually growing weaker. Has now a feeling of fullness and pressure from gas, but no pain. Appetite is very poor, and he has lost twenty-five pounds in the last

four months. Bowels constipated. Sleeps badly. *Physical Examination:* Patient is emaciated, anæmic and cachectic, and seems weak. His heart and lungs are negative. A large tumor is felt in the left of the epigastric region, hard, movable with respiration, but not apparently directly connected with the spleen or left lobe of the liver. Urine is negative. Gastric contents examined several times after test breakfasts showed much mucus.

TUMOR OF THE BODY (SCHEMATIC). A. J. W., ÆT. 60.



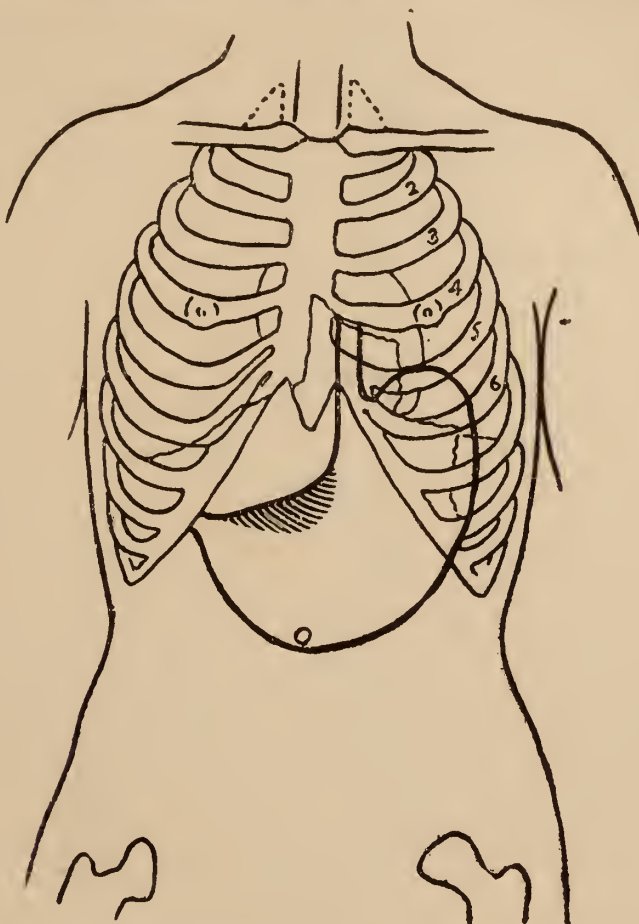
SYMPTOMS.—*Palpable tumor.* Constitutional: Emaciation, weakness, cachexia, absence of hydrochloric acid. *No mechanical symptoms.* Absence of vomiting, pain, retention and lactic acid.

No free hydrochloric acid. No lactic acid. The administration of hydrochloric acid gave such marked relief that a faint hope was entertained that there might be a mistake in diagnosis. An exploratory incision showed a diffuse flat tumor of the anterior wall of the stomach, with glandular infiltration and adhesion to the left lobe of the liver.

Carcinoma of Lesser Curvature. J. L. P., æt. 42, male, lawyer. Referred by Dr. Morrow. Has five children, all perfectly well. Family history good, except sister, who has had for years stomach trouble. Previous health always good. For last two or three years believes he may have had an inordinate appetite. In November, 1899, began to be bloated and belch a great deal of gas; bowels felt contracted and were very constipated. Between 12 and 2 A. M. he has had so much distress, fullness, pressure and weight that he has taken an emetic about once a week in

order to remove contents of the stomach. In January his stomach was washed out a number of times, especially when he had a feeling of accumulation of gas and sensation of weight and pressure. About March 1st, began to have a loathing for food. Never has vomited voluntarily. Has a dull, heavy pain, especially at night, in region of the stomach. *Physical Examination* of chest, negative. Liver and spleen not enlarged.

TUMOR OF THE LESSER CURVATURE (SCHEMATIC). J. L. P., ÆT. 40.



SYMPTOMS.—*Palpable tumor.* *Constitutional:* Emaciation, weakness, cachexia, free hydrochloric acid present. *Mechanical symptoms* not well marked.

Urine negative. Gastric splashing obtained just below the umbilicus. A tumor is palpable between umbilicus and sternum, transverse in position, movable on deep respiration, and can be held back after deep inspiration, not especially sensitive on pressure. Test breakfast. Abundant contents obtained; little mucus; no blood. T. A. 48. Free HCl. 32. No lactic acid. Sarcinae, yeast. Seeds present. Washing out showed remnants of food eaten day before. On dilating stomach with air position of tumor changed and was not so well marked. Lower curvature determined to be one inch below umbilicus and lesser curvature at the line of tumor. On washing out and proper diet the retention was much lessened, also the gastric distress. Operation was not advised as the condition would necessitate total removal of the stomach, and a tumor so palpable probably had metastases in other organs and glands. Patient and family insisted upon exploratory incision. This was made and the condition found as expected, also adhesion of the stomach to the liver.

SURGICAL INTERVENTION IN CARCINOMA OF THE STOMACH.*

BY WILLIS G. MACDONALD, M. D.,

Adjunct Professor of Surgery, Albany Medical College.

The present status of medical opinion with relation to surgical intervention in carcinoma of the stomach is undoubtedly in a condition of progressive and favorable transition. The too general disposition to regard carcinoma of the stomach as an absolutely incurable disease, so commonly prevalent in the profession a few years since, has recently been followed by a distinctive reaction in favor of surgical intervention undertaken early in the history of the disease as a matter of routine. The reasons for this reaction lie near at hand in the more careful clinical study in diseases of the stomach, in the more general employment of physical and chemical methods in investigating the condition of the stomach and its contents, and in the great improvements that have been made in the technique of gastric surgery. The very natural sequences of this activity are that cases are diagnosed earlier and receive proper surgical intervention at a time when every advantage for ultimate cure presents.

The frequency of carcinoma of the stomach as a cause of death has been established by the careful statistics of Tanchow, Welch, Van Valzah, Gult and many others. The mass of material at their disposal has been so great that practically ordinary sources of error may be excluded. Their collective investigations demonstrate that at least one and a half per cent. of all deaths are due to carcinoma of the stomach. Again if we consider the relative frequency in which the stomach is the site of malignant neoplasm, we find in the study of the thirty thousand cases of carcinoma, it was found located in the stomach in twenty-one per cent. of the entire number. Virchow places the relative frequency even higher at thirty-five per cent.

The recent study of the question of the increased frequency of cancer as a cause of death in England, France, Switzerland and in this country cannot fail to awaken greater

*Read before the Medical Society of the County of Albany, February 13, 1901.

interest in this very important source of mortality, and at the same time lead to further research with relation to the best methods to be employed in staying the ravages of this dread disease.

At the present time the entire resources of internal medicine can only afford very temporary palliation in carcinoma of the stomach. The patient suffering from carcinoma of the stomach must seek in surgery the only hope for permanent relief. Recently the author of this paper took occasion to make an exhaustive investigation of the ultimate results following operations for carcinoma of the stomach. Nearly six hundred cases were traced until death from a return of the disease occurred, or the patients were known to be alive and well after three years. Out of the entire number, forty-three were alive and without signs of recurrence after three years, or nearly eight per cent. of the whole number. It will be granted at once that the percentage of recoveries is not large, but it compares favorably with carcinoma of the breast a few decades since. The technical improvement, however, in the operative treatment of carcinoma of the breast has in the hands of a number of operators, Halstead, Kocher, Cheyne and others, made wonderful progress within the last few years, and now a number of operators are able to show a very large percentage of recoveries when three or five years have elapsed since the operation. While very much of this improvement may be very reasonably attributed to more extensive operative interference, yet on the other hand early diagnosis and prompt intervention are factors in the greatly improved results.

Recent developments in the field of diagnosis as associated with carcinoma of the stomach have been so fully discussed in the papers presented this evening that there remains very little to be said. However, with your permission, I should like to refer very briefly to the advantages to be derived from an exploratory incision in certain obscure cases of gastric disease, and in another paper I have referred to a group of symptoms which in my opinion are a sufficient indication for an exploratory incision: first, a chronic gastritis, progressive in character, which does not improve under proper dietetic, medicinal and physical treatment;

second, a loss of gastric motility; third, progressive diminution of gastric peristalsis; fourth, a diminution of free hydrochloric acid progressive in character; fifth, emaciation of the patient under forced diet; sixth, a reduction of the haemoglobin in the blood progressive to 65 per cent. or under, especially if associated with a moderate leucocytosis. It will be noted that several of the distinctive symptoms, including the presence of a tumor, do not form any part of this group of symptom complex which, in my opinion, furnish a basis for operative intervention, and it may be safely asserted that when this entire group of symptoms present themselves, even

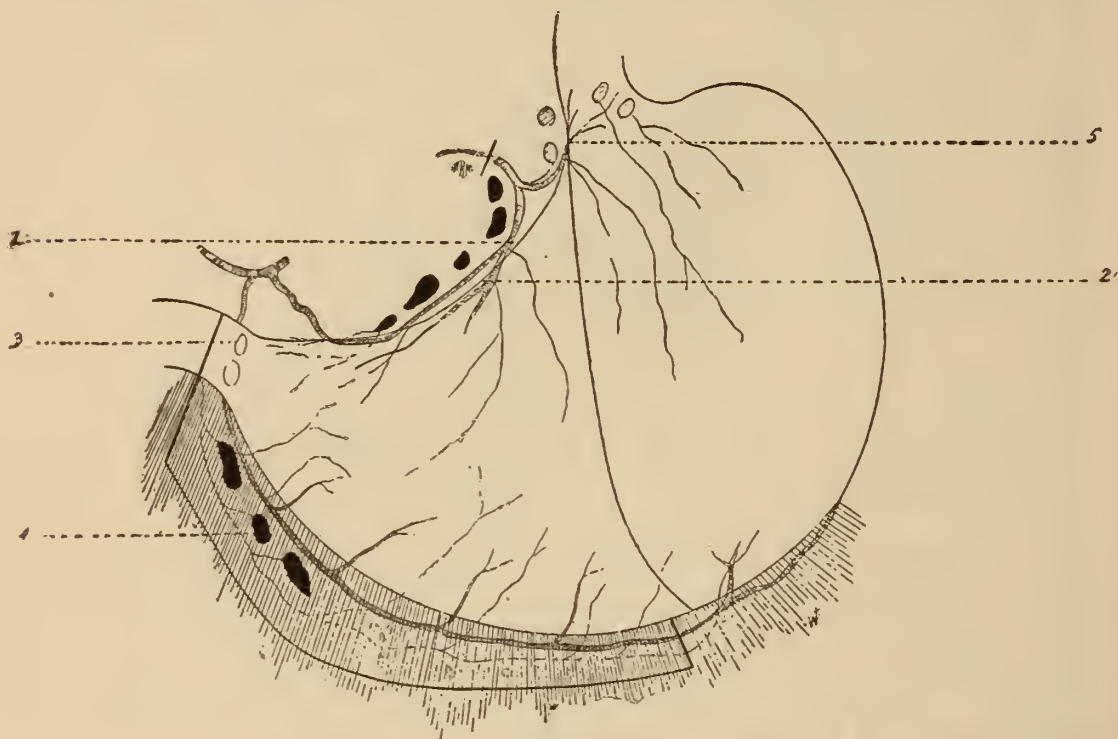


FIG. I.

if carcinoma is not found after exploration, other conditions will present themselves, which, beyond any question, will be greatly benefited by surgical intervention.

In approaching the subject of surgical intervention in cases of carcinoma of the stomach, certain anatomical conditions are to be carefully considered, not alone in the natural distribution of carcinoma in the stomach but in the lymphatic involvement which is so frequently associated with that disease. McArdle collected 1242 cases of carcinoma of the stomach, of which 802 were limited to the pylorus, and of this number 496 were not associated with important lymphatic

involvement. Gussenbauer after the examination of the death registers of 542 cases of carcinoma of the pylorus states that in 41 per cent. there was no metastasis of the disease in other organs and that in 37 per cent. there were no adhesions. Considering the frequency with which the region of the pylorus is involved as a proper preliminary to successful intervention in carcinoma of the stomach, careful study of the lymphatic distribution seems most desirable. Cuneo and Most have by the improved methods for the study of the distribution of the lymphatics carefully located the lymph nodes usually found in carcinoma of the stomach. Their relations are very well illustrated in the drawing (Fig. 1)

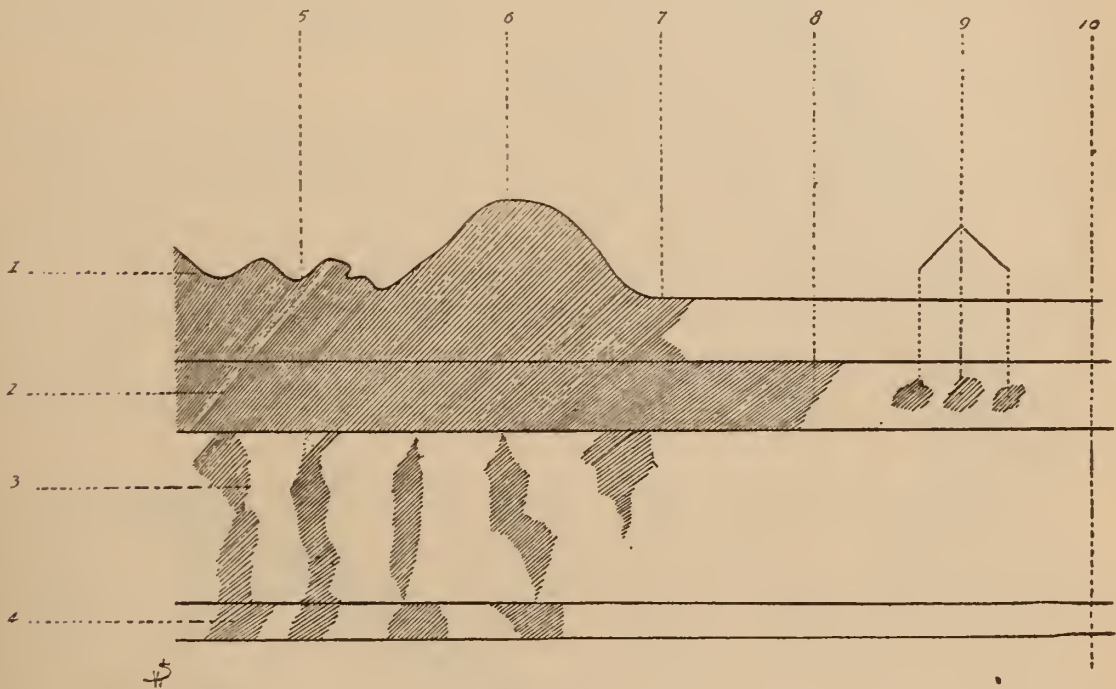


FIG. II.

presented by Cuneo showing the group of lymphatic glands, one group lying along the lesser curvature in the gastrohepatic omentum in immediate relation to the coeliac axis and the hepatic blood channels. Another group is found along the greater curvature, a third along the outer border of the cardia, while other groups are found respectively in the retropyloric and the retro-oesophageal spaces. In a complete pylorectomy, it is extremely desirable to remove the lymphatics along both curvatures of the stomach as well as those lying behind the pylorus. This should be a part of the routine of any radical operation. A second drawing (Fig. 2) shows the relative

lines of invasion of the different layers of the stomach wall, besides the limits of infiltration of the surrounding lymphatics. As a rule, the duodenum is not extensively involved in pyloric carcinoma, although a few observers have found infiltration of Brunner's glands in the upper portion of the duodenum.

There is little justification for the total extirpation of the stomach in a majority of cases, and the probability of cure will not be greater than surgical resection. The old rule of cutting one centimetre beyond all evidences of carcinomatous infiltration is not wide enough. Personally, I feel that the line of excision in the stomach should be at least three centimetres from the border of the last palpable infiltration, and in the duodenum at least two centimetres from the most dependent portion of the growth.

Reference has already been made to the sources of failure in employing the older technique of Billroth for pylorotomy. The first, and chief, undoubtedly has been due to infection from the stomach contents at the time of operation; the second, from defects in the method of suture of the resected portions of the stomach and duodenum; and third, from the condition of biliary regurgitation into the stomach after operation.

A variety of clamps have been devised to overcome the first difficulty. I am familiar, however, with none so satisfactory as the more recently devised clamps of Kocher, which I present for your inspection. The accompanying drawings show very well their mode of application. (Figs. 3 and 4.) When accurately adjusted, there is very little opportunity for leaking of the stomach contents, and they present material advantages in the control of haemorrhage from the wall of the stomach. By the application of these clamps to the stomach and duodenum with a little care, all dangers of sepsis from the stomach and duodenum are avoided, and the rapidity with which a pylorus may be resected is greatly increased. Very little time is required to close the ends of the stomach and duodenum with a running catgut suture

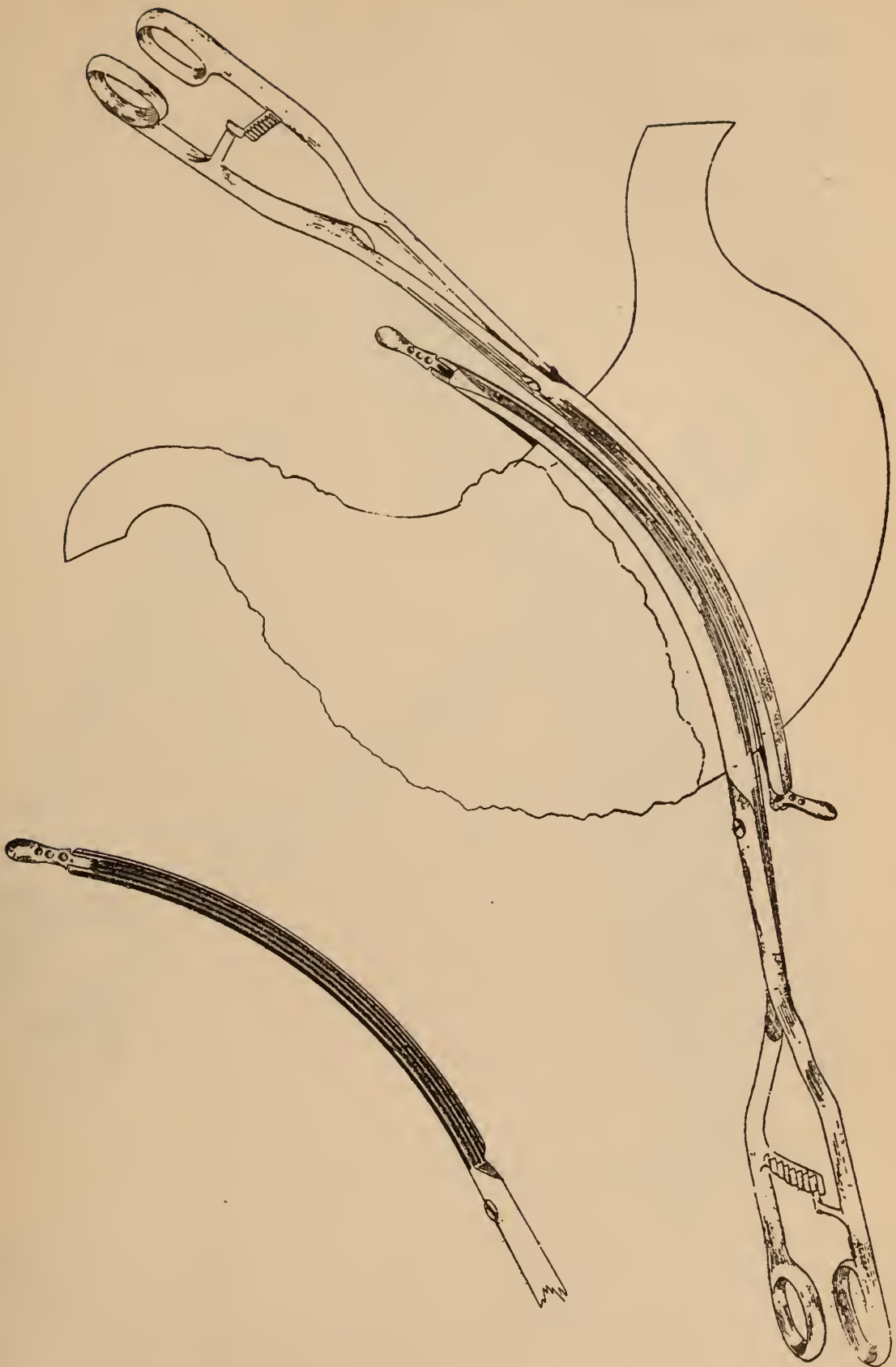


FIG. III.
Drawing (schematic) illustrating use of Kocher's stomach clamps.

involving all the coats. (Fig. 5.) This, again, is invaginated within the stomach and the calibre of the duodenum, and the stump buried by rows of Lembert sutures. (Fig. 6.) The manner of performing the subsequent gastro-enterostomy lies largely with the preferences of the surgeon doing the operation. My earlier gastro-enterostomies were done by the Wölfler method of attaching the jejunum and the anterior wall of the stomach. It appears to me that the two fatal cases in which I applied that method were due to regurgitation of bile into the stomach and persistent vomiting following operation.

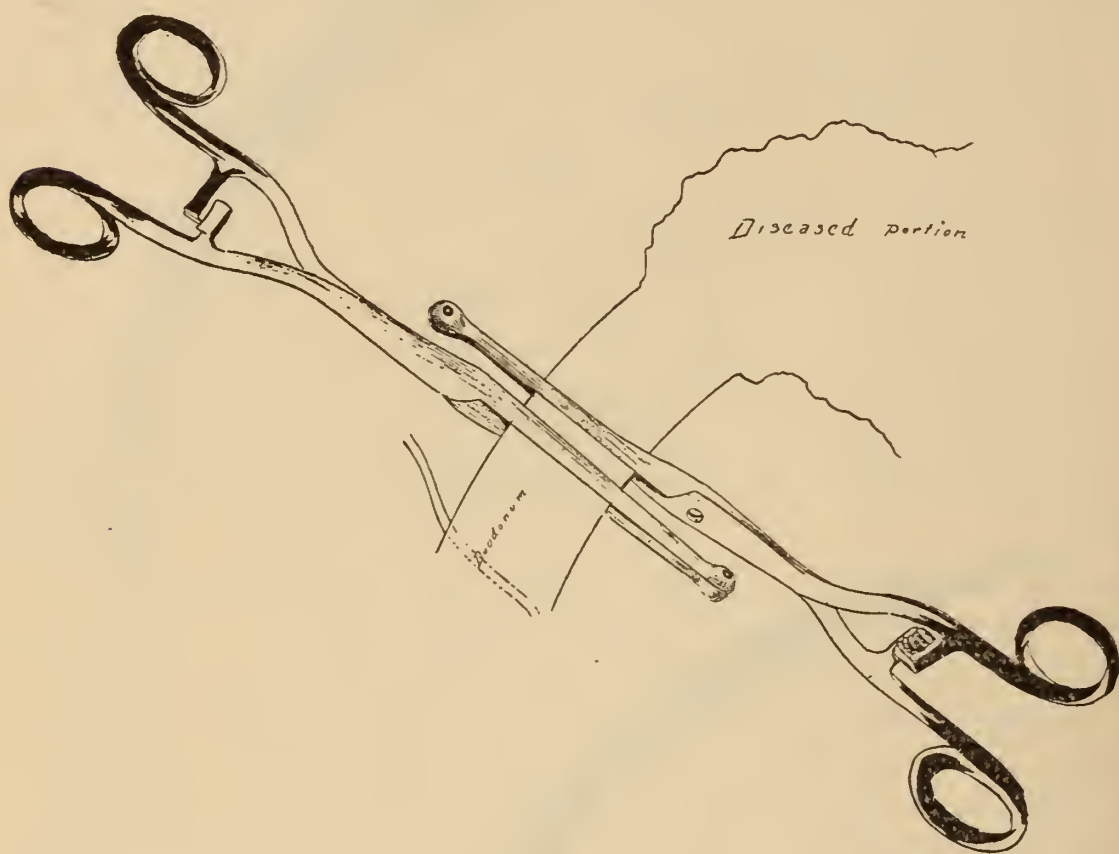


FIG. IV.

Drawing showing adjustment of intestinal clamps.

Some two years ago I commenced employing von Hacker's method of attaching the jejunum to the posterior gastric wall with a re-anastomosis between the duodenum and the jejunum. The results of this method of operation have been most satisfactory. During the past year I have employed it eight times, with seven recoveries. For the most part the anastomosis between the jejunum and stomach has been made

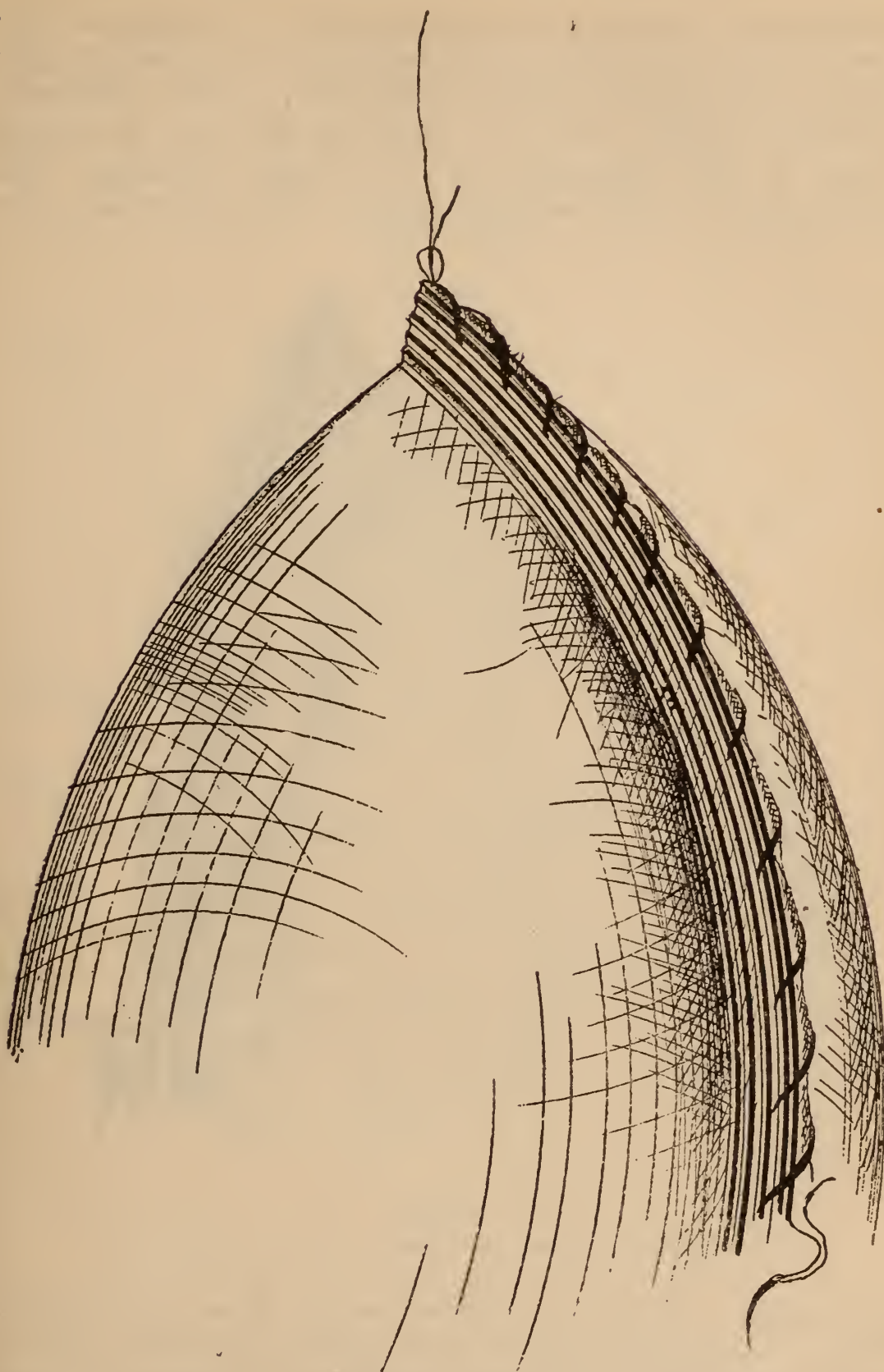


FIG. V.

Drawing illustrating method of closing stomach and duodenum. First suture through all coats of medium catgut.

by the suture method, although a number of surgeons have been quite as successful in the employment of the Murphy button. For the secondary anastomosis, I have uniformly used the Murphy button of moderate size, by the device which is here illustrated by this simple drawing. The anastomosis by this method requires very little time for its

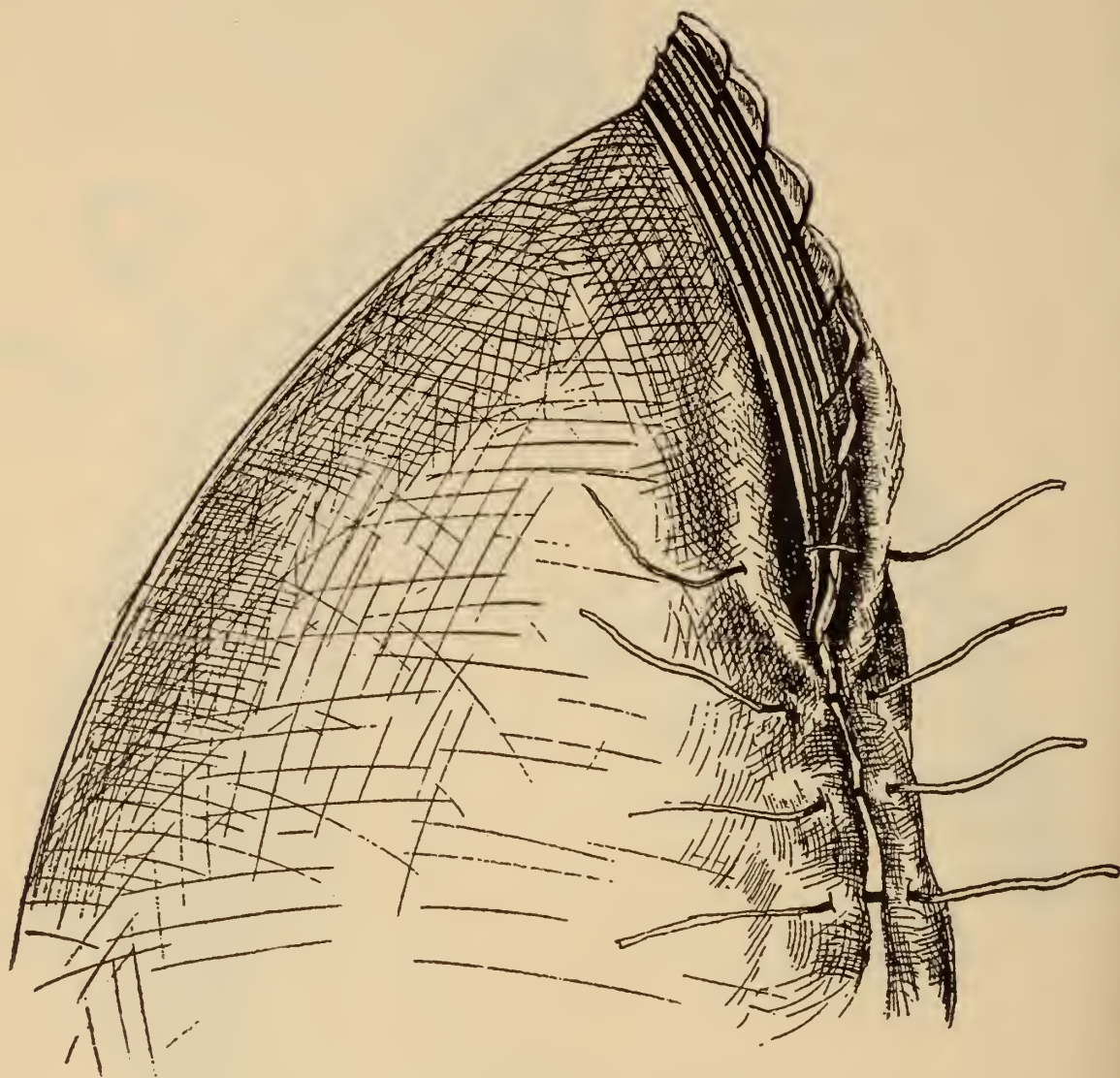


FIG. VI.

Drawing illustrating method of closing stomach and duodenum.

performance and can be readily completed in five minutes. While the entire technique of this operative procedure appears quite complicated, yet under favorable circumstances I am sure the entire operation can be done within forty minutes, including the closure of the abdomen.

When an operation has been carried out by this method to

its completion, the following advantages may be claimed: first, freedom from contamination of the wound by stomach contents; second, accessibility of the neighboring lymphatic

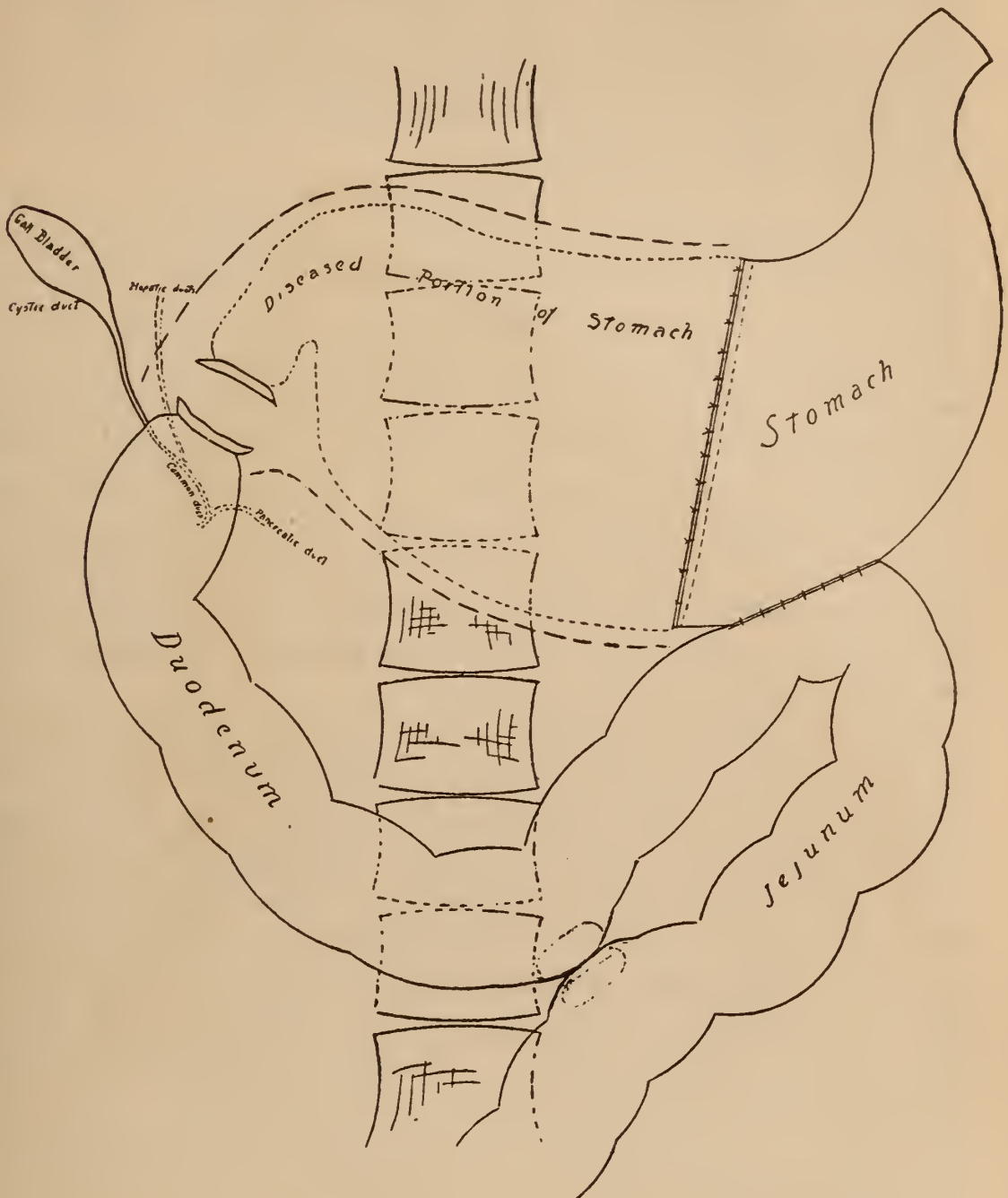


FIG. VII.

Drawing (schematic) illustrating operation of resection of stomach.

nodes for extirpation; third, no subsequent danger from suture perforation; fourth, freedom from loss of blood; and, fifth, the great saving of time required for the operation. The surgeon is not embarrassed in the least by the amount of

tissue which he removes, as no effort is made to bring the duodenum and the remainder of the stomach in apposition.

Lateral anastomosis can be readily accomplished by a variety of methods, including the button. Practical experience has shown through the more recent statistics of Mikulicz, Maydl, Kocher, and others, that an operation of this form presents far less immediate dangers to the patient than does the older method of Billroth.

But not all cases can be regarded as suitable ones for radical operation. Are we, then, to close our exploratory incision when we find extensive lymphatic invasion, infiltrated adhesions to the surrounding organs and to the parietal peritoneum? Experience has shown, again, that even in these cases life may be prolonged, the disagreeable symptoms associated with the disease distinctly ameliorated, by the operation of gastro-enterotomy. I have performed this operation already a number of times and afforded patients agreeable relief. In some of the advanced cases I have not hesitated to employ the Murphy button for the purposes of the operation, and under such circumstances it can be readily completed within a half-hour.

The immediate mortality for the operation of pylorectomy is an interesting study. Ewald condemned the operation because of its great mortality, 73 per cent.; and until 1888 the mortality was somewhere in the neighborhood of 60 per cent. Billroth's mortality was 45 per cent., Mikulicz 30 per cent., Kronlein 25 per cent., Maydl 16 per cent., Kocher 8.7 per cent. Mayo Robson, in a study of 572 cases collected from various sources, finds an average mortality of 30.4 per cent. Guinard found that in 148 cases of pylorectomy with end-to-end anastomosis, deaths were fifty-six, or 37.8 per cent., and in sixty-four cases of pylorectomy with subsequent lateral anastomosis there were ten deaths, or 15.6 per cent. This showing has been equally favorable in the experience of others.

The last illustration (Fig. 7) shows graphically the extent of tissue removed and the sites of invagination and anastomosis.

REPORT ON THE GASTRIC SECRETION IN TWELVE
CASES OF PULMONARY TUBERCULOSIS,
FIVE OF WHICH GAVE NO EVIDENCES
OF TUBERCULOSIS WHEN
FIRST SEEN.

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The frequency of the association of gastric symptoms with pulmonary tuberculosis, together with the well demonstrated clinical fact that some early cases of pulmonary phthisis present which give no symptoms referable to the lungs, is my reason for presenting the histories of twelve cases, all of whom consulted me for some gastric implication, and five of whom gave no evidence when first seen by me of cough or expectoration. In the other seven cases the gastric symptoms were those which were uppermost in the patient's mind, still when first seen evidence of tuberculosis of the lungs could be made out. The analyses of the gastric secretion in most of the cases were made by reason of the gastric symptoms, the purpose being to apply treatment, aided by the information gained by these means. No case is here reported in which tubercle bacilli were not found at some time in the sputa, save one, namely, No. III, the case of chronic pleurisy with effusion. In all the cases repeated examinations of the stomach contents were made quantitatively, after test meals, following a night's fast, except, in Case XI one examination was made. The usual test meal employed was Ewald's—a dry roll and about three-fourths of a pint of either warm water or weak tea. After about an hour the stomach contents were brought up, filtered and tested for acidity by the usual decinormal soda solution, using phenol-phthalein as an indicator. As a test for hydrochloric acid, Gunsburg's reagent was used, while the presence of lactic acid was determined by Uffelmann's reagent.

Since 1896 I have used Töpfer's method of estimating acidity, using Gunsburg's to first test for free HCl., but for

the purpose of uniformity and comparison the determinations with the older methods were continued.

CASE I. *May 18, 1894.* M. A., U. S., female; 23.

Family History: Maternal aunt died of "galloping consumption," otherwise negative.

Patient's History: Has always been delicate. Has been anæmic for a year. Menstruation commenced at 14; irregular and intermittent during past year; before then normal. Has some dyspnoea on exertion. No cough, irritation or expectoration. Is not prone to colds. Cheeks are not flushed in afternoon. No night sweats. Complains of severe pains in epigastrium, burning or gnawing in character, coming on an hour or two after meals, relieved for a time by food, especially milk, but less by water. Has vomited for four weeks a sharp, acrid, watery material, which, in the words of the patient, "scalds the mouth." She does not seem to be a neurotic. Appetite good. Bowels inclined to be confined.

Physical Examination: Pulse, 90; temperature, 98.8° (2:30 P. M.); skin and mucous membranes pale; tongue perfectly clean and normal in appearance; respiratory excursion of sternum very slight. Clavicles not prominent. Supraclavicular fossæ not sunken. No abnormal chest dullness. Hæmic bruit in vessels of neck. Nothing else abnormal on auscultation. Tube passed and lavage. Ewald's test meal ordered. About an hour after meal was attacked with severe gastralgia and vomited. Vomited material was brought to office. Examination revealed total acidity 96. Gunzburg's shows HCl. No lactic acid.

May 26, 1894. Ewald's test meal, acidity 90. HCl. present. No lactic acid. Subjectively much improved. Treatment continued and lavage with bicarbonate of soda solution every morning. Is able to pass the tube herself. Urine negative; reaction alkaline. *June 6, 1894.* An hour after eating two soft-boiled eggs no pieces of egg brought up by expression or lavage. Acidity 80. HCl. present. No lactic acid. Patient says she feels perfectly well and can eat anything. Lavage discontinued. *June 20, 1894.* Acidity 72 HCl. present; no lactic acid. *December 18, 1894.* Says she caught cold a month ago and since then has been coughing. Appetite fair. No night sweats. Pulse, 90; temperature (9 A. M.), 98.8° F. Turpen Hydrate ordered. No chest examination. *December 28, 1894.* Cough somewhat better. Tires easily; thinks she has some fever in afternoon. Told to return in afternoon. *January 20, 1895.* Patient did not return until to-day. Says she has no cough, but feels tired all the time. A night sleep does not rest her. Has lost weight. In morning has to clear her throat of a slight accumulation of mucus. Pulse, 96; temperature, 99.6° F. Malar prominences flushed; rest of face pale.

Physical Examination: Left supraclavicular and infraclavicular spaces more depressed than right side. Impaired resonance (slight) over left apex. Bronchial breathing over left apex to same extent as can be normally heard over right apex. Over left apex whispering voice sounds (pectoriloquy) and crepitation distinct.

Diagnosis: Tuberculosis pulmonum of left apex. Sputum ordered.

January 22, 1895. Examined a specimen of the expectoration which patient says she brings up (without coughing) "in clearing throat." Specimen shows a few tubercle bacilli. *January 27, 1895.* Says she feels better, but looks ill. Weight 118 pounds. Complains of gastric distress, which is relieved by food. Test meal, Ewald's. Acidity 62. HCl. present. No lactic acid. Advised to add teaspoonful of lime water to each glass of milk and to drink at least a quart of milk a day, as she says milk agrees with her. Guaiacol continued. *February 20, 1895.* Patient looks about the same as at last visit, but seems to show slight dyspnoea. Pulse, 100; temperature (3 P. M.), 100.5°. No chest examination. Creosote carbonate ordered, five minims four times daily. Appetite not so good, but thinks it due to the quart of milk she drinks daily. HCl. present after Ewald test meal. Acidity 40. No lactic acid. *March 10, 1895.* Says she is feeling better than she has for a year. Chest about the same as last examination, but I think the dullness over left apex extends lower and is more marked. Crepitant rales can be heard over left apex in front and behind. *September 20, 1895.* Has not been to the office since March 10th last. Patient seems much thinner. Cheeks flushed; facies, particularly eyes, have characteristic glassy appearance.

Physical Examination: Consolidation over upper left lobe, whispering pectoriloquy; bubbling rales, Wintrich's symptom. Dullness over right apex. Pulse, 108; temperature, 100° (2 P. M.); anorexia. Complains of inability to eat anything with comfort. Everything distresses. Gastric splashing, although has had no food except a cup of milk since night before. Dyspnoea on slight exertion. Thinks her ankles swell at times. Has night sweats. Tube passed; evidence of gastric stasis, twenty-four ounces of fluid being withdrawn, followed by lavage. Test meal given. An hour later the tube was passed and gastric contents examined. Acidity 18. No free HCl. Organic acids, including lactic and butyric.

September 28, 1895. Has no appetite, in fact has an aversion for food, particularly meats. Has had a diarrhoea for a week. Tires very easily. and coughs a great deal at night. Ewald's test meal. Tube passed by the patient. Total acidity, 20. No free HCl. Lactic and butyric acids present. Pulse, 110; temperature (9 A. M.), 100°. Ankles show slight œdema. Urine acid, a trace of albumin and a few hyaline casts. No sugar. *October 18, 1895.* Saw patient at her home. She seems about the same, but expectorates more, the sputa being tinged with blood. Pulse, 108; temperature (3:30 P. M.), 103°. Is very weak. Diarrhoea not controlled by Hope's acid mixture. Weight, 98 pounds. *November 1, 1895.* Was called to her home and found patient in bed, being too weak to sit up. Pulse, 120; temperature (4 P. M.), 103°. Sputa still blood stained. Some œdema of lungs. Diarrhoea not controlled. *November 3, 1895.* Patient gradually grew weaker with increasing œdema of the lungs and died at 3 A. M.

Autopsy not permitted.

CASE II. A. G. S., male, 42, U. S., barber. Came to office March 16th, 1895.

Family History: Father had asthma. One sister died of chronic bronchitis, which was probably a pulmonary tuberculosis. Otherwise negative.

Personal History: Has complained of dyspepsia for two years. Before this was perfectly well, in fact, has followed athletic sports for years. Two years ago his wife died of pneumonia, being ill only ten days, which has made a great change in his mode of life. He became very much depressed and ate at irregular intervals, the food being prepared in unaccustomed ways. Before his wife's death his appetite had always been good, but since has been capricious. Has no cough nor expectoration. An hour or two after eating, and at times during night, has a severe burning sensation in epigastrium. Thinks it is relieved by taking food, but is not sure. Bowels constipated.

Physical Examination: Is spare, but muscular. Expansion is full and equal on both sides of chest. Supraclavicular fossæ not depressed. Some bulging over epigastrium; pressure over this area shows tenderness. Area of cardiac dullness increased downward and to left. No valvular murmurs. Pulmonic second sound accentuated. Pulse, 76; temperature (3:30 p. m.), 98°. Weight 134 pounds.

March 17, 1895. Ewald test breakfast. Tube passed with some difficulty, due to patient's holding his breath. Gastric contents show acidity of 74 from free HCl. No lactic acid. Urine passed in office acid in reaction, no albumin nor casts; no sugar. *April 10, 1895.* Says he is much better. Advised continuing alkaline mixture. *May 17, 1897.* Has been out of city, but has been feeling so badly that he came back. Patient looks very badly. Has lost flesh during past six months, coughs and raises a good deal. Appetite poor. Breath foul. Tongue yellowish coat. Will send sputa.

Physical Examination: Dullness over whole upper left lobe, except second left interspace. Think I can make out cavity. Says he thinks it would be no trouble to pass tube, as it gave him relief before, and he has fasted on purpose. Ewald's test meal. Acidity 20. No free HCl. No lactic acid present. Pepsin present.

May 22, 1897. Has pain in right shoulder. Ewald breakfast and test shows acidity 14. Lactic acid present. No HCl. Sputa in stomach contents. Sputa shows tubercle bacilli in abundance. Advised against swallowing sputa. *June 30, 1897.* Heard from him by letter. Is about the same, but has night sweats. Appetite very poor. *September 6, 1897.* Is no better. Says he is sure if stomach is washed out will be much relieved. Ewald's an hour after lavage. Acidity 8. No free HCl. Lactic acid present. *September 12, 1897.* Heard from him last by letter. Says his stomach condition is better, and has gained two pounds in weight, but is very weak.

CASE III. L. H., 27 years of age, American; journalist by occupation; consulted me January 17th, 1895, complaining of pain after meals in region of stomach, gnawing in character, appetite fair, belches considerable gas, which has an intensely sour taste. Six months ago he had some severe pain in right side, increased on taking a deep breath; lost flesh,

but does not know how much; coughed very little since the acute attack of pain six months ago. Shortness of breath on slight exertion, with palpitation of heart.

Physical examination shows bulging intercostal spaces on right side with impairment of movement, flatness to upper border of the fourth rib in axillary line. No vocal fremitus, voice sounds absent. Above the area of flatness, hyper-resonance with harsh breathing. Introduced hypodermic needle and withdrew clear fluid. No other pulmonary signs. Apex beat displaced to left. Heart sounds loud, particularly pulmonic and aortic. No murmurs except a soft blowing murmur systolic in time, heard over the subclavian artery. Slight epigastric tenderness. The lower border of the stomach extends down to an inch below the navel. Both kidneys and the spleen palpable. Ankles show slight œdema. Liver extends two inches below ribs in axillary line. Urine normal. Gastric contents an hour after Ewald breakfast show acidity of 98, due to HCl. No lactic acid; microscopically, sarcinæ ventriculi. Temperature, A. M., 98.8°. P. M., 101°. Pulse, 102, full and strong. Advised painting chest with iodine. A quart of milk rendered alkaline to be taken daily. Alkalies after meals. Carlsbad Sprudel salt daily.

January 24. Seems about the same, but has less distress in stomach. *February 7.* Gastric contents show acidity of 93, due to HCl. Temperature, A. M., 98.2°; P. M., 100.8°. *February 14.* Can still obtain no sputa. Temperature at 3 P. M., 99°; pulse, 98. Think that effusion does not extend so high. *March 9.* Patient feels better; shortness of breath less; no gastric pain since last visit; appetite good; flatness very much less; voice sounds returning. Gastric examination shows acidity of 62; no lactic acid; pepsin and rennin ferments active. *April 30.* Is much better, dullness has nearly disappeared. Liver extends to free border of ribs. Voice sounds heard all over right chest. On deep inspiration, a friction rub can be distinctly heard. *May 17.* With exception of friction rub and slight dullness, no other abnormal sounds. The murmur in left subclavian artery is absent. Gastric examination: acidity 64, due to HCl. No lactic acid. No cough nor expectoration. *June 4.* Heard from patient after inquiry. Says he feels perfectly well, except a sense of constriction in right side and now and then some darting pains.

CASE IV. R. T. H., 19 years of age; was born in the U. S., single, and a book-binder by occupation. Her family history is that her mother and three sisters died of pulmonary disease. One brother has a cough and one sister is well, who is older than patient. Patient is anæmic, complains of shortness of breath on exertion; is rather stout and has lost no flesh. During the past year has lost her appetite, and everything she eats distresses her. Belches a great deal of gas. Her abdomen distends after eating, so that she is compelled to loosen her clothing. She is constipated. No cough nor expectoration.

November 5, 1894. Nothing abnormal in thorax save a murmur heard at apex, systolic in time, not transmitted, but absent at the end of expiration. Marked abdominal distention. *November 6.* Test breakfast with-

drawn. 200 cc.; acidity, 58. HCl. present. No lactic acid. Pepsin active. *December 3.* Patient says she feels much better. Is still very anæmic. *January 13, 1895.* Has more color and less gastric distress. *August 11.* Feels badly for a week with burning pain after eating. Vomited a very sour material. Stomach contents after test breakfast show acidity of 73. Some starch cells and bacteria. *August 18.* Came to office in afternoon. Face flushed. Temperature 99.6°. Examination of the chest shows dullness at right apex with harsh breathing all over the right lung. Can not find any tubercle bacilli in sputum. *August 30.* Examined another specimen of sputum which shows the presence of tubercle bacilli. *September 6.* Coughs a great deal in the morning, but does not raise much. No vomiting, but considerable gastric distress. *September 12.* Gastric examination shows an acidity of 54. HCl. present. No lactic acid. Much less distress after eating. *September 30.* Physical signs about the same as at previous examination. *November 17.* The dullness in chest continues and a few moist rales can be made out. Sputum contains tubercle bacilli. *October 1.* Gastric contents examined after test meal show acidity of 47. HCl. present. No lactic acid. *February 3, 1896.* Patient has lost flesh; appetite poor; dullness over whole upper right lobe; bronchial breathing; moist rales. Examination of stomach contents after test meal shows acidity of 27. HCl. present. No lactic acid, but odor of butyric acid. Much mucus. Tubercle bacilli present in sputum.

CASE V. M. Q., a laborer by occupation, 46 years of age; born in Ireland, married.

Family history negative.

Personal history is that he has always enjoyed good health until two years ago, when he caught cold. Since has coughed some and raised quite a little, especially in morning. Has lost some flesh. Appetite poor. Bowels irregular.

April 7, 1897. Patient looks haggard. Tongue coated with a thick brownish coat. Breath very foul. Dullness over lower lobe of left lung, with bronchial breathing. Heart normal. *April 11.* Sputum contains tubercle bacilli. Feels nauseated nearly all the time. *April 12.* Contents of stomach after test breakfast show acidity of 49. HCl., sarcinæ and yeast present. *May 14.* The wash water from lavage is quite clean and free from the odor formerly present. After test breakfast acidity 52 HCl. and sarcinæ present. Chest about the same. *June 4.* No change noticeable. *September 1.* Have not seen patient since June 4th, and is no longer at address given me by him.

CASE VI. L. W., 27 years of age, printer by occupation; born in United States.

Family history is negative, except one sister, who now has tuberculosis.

Personal History: Had measles a year and a half ago, since when has had some cough with small amount of expectoration, particularly in morning. Has had pains in the upper portion of the chest on the right side, with sharp stabbing pains when taking deep breath. Has a good deal

of distress at pit of stomach and belches a great deal of gas. Has very poor appetite and now and then vomits in the morning a sour fluid. He thinks the vomiting is due to the dropping of mucus from a post-nasal catarrh, irritating the pharynx. Has lost fifteen pounds in weight during past two months. Sweats at night.

Physical examination, August 31, 1897: Impaired movement over upper right chest; supraclavicular and infraclavicular fossæ depressed. Impaired resonance to upper border of third rib on the right side. Some bronchial breathing. No crepitant rales can be heard. The rest of the pulmonary area seems normal. The heart sounds are normal, as is the area of cardiac dullness. No tenderness over epigastrium, but splashing is present. The urine is normal. Sputum contains tubercle bacilli.

September 2. Patient has vomited, and complains much of gastric symptoms. A tube was introduced and stomach contents removed. Ewald test meal. An hour afterwards the contents were again removed and showed an acidity of 63, due to HCl. No lactic acid. Considerable mucus, which has evidently been swallowed. *September 9.* Says he feels better. Has vomited but once since last visit. Stomach contents show an acidity of 54 HCl. present. Some mucus. Patient advised to go to the Adirondacks; to use small amount of fluid by mouth, supplying the deficiency *per rectum*. *January 2, 1899.* Patient is home for a visit; feels well; has no stomach disturbance, cough nor expectoration. Examination of the gastric area shows no tenderness nor splashing.

CASE VII. H. L. B., farmer, age 31, American.

Family history is negative.

His *personal history* is that he was well until a year ago; then had pleurisy involving left side, confining him to his bed for a week. Since complains of "stitches" in the left side, slight dry cough, pain in stomach coming on about half an hour after eating, relieved by food, particularly milk or bread. At times has a regurgitation of gas from the stomach with intensely sour taste. Appetite is capricious, being at times very hungry, but very little food will satiate, while at other times a large amount of food is enjoyed.

Physical examination, November 14th, 1896, shows diminished expansion of left side of chest, with impaired resonance at apex, where crepitation can be made out. Dullness over lower left chest, intercostal spaces somewhat depressed; breath sounds are distant, and vocal fremitus is diminished. Traube's space decreased in area. Heart sounds normal, except accentuation of the pulmonic second sound. Pulse, 84, full and regular. Slight diffuse tenderness over gastric area. Liver area extends a finger's breadth below free border of ribs, the thorax being very long and the costal angle quite acute. Both kidneys palpable; the right movable. Urine normal. Weight 137 pounds. Test breakfast ordered.

November 15. Stomach empty after night's fast. Ewald's test breakfast. Breakfast removed by tube. Amount 300 cc. Total acidity 110, due to free HCl. Atropin ordered, gr. 1-200 four times a day until throat feels dry. A quart of top milk daily with bicarbonate of soda added. *December 12.* Says he

feels better and has less gastric distress. Gained two pounds in weight. *December 28.* Physical signs about the same, except no tenderness in epigastrium. Looks and acts better. Total acidity 94. HCl. present. Pepsin and rennin active. Gained a pound in weight since last visit. *January 30.* Says he caught cold; expectorates some. Examination shows a few tubercle bacilli. No distress in stomach. Temperature in the morning 98.8°. Gastric contents removed after test breakfast amounts to 200 cc., with an acidity of 62. Pepsin and rennin active; some mucus. Temperature, 3 P. M., 100.4°. *February 5.* Still coughs and raises. Advised patient to sit out of doors three hours daily in pleasant weather, thoroughly wrapped up. Tubercle bacilli present in sputum. Gastric contents show acidity of 67. HCl. present. No lactic acid. Some mucus. *February 19.* Much better; appetite good; no cough nor expectoration. No tenderness nor pain in epigastrium. Temperature, 98.8°. Gastric contents show acidity of 72, due to HCl. Mucus small in amount. *March 3.* Feels much better, and now weighs 147 pounds. Gastric examination shows acidity of 68, due to HCl. Subjectively no gastric symptoms are present, and the appetite is good. *March 28.* Says he is well. Physical examination shows dullness, but no rales at left apex; dullness with impaired vocal fremitus at lower left lobe. *January 4, 1897.* Wrote patient, who replied that he was perfectly well, except that on extreme exertion his breath was somewhat shorter than before sickness. Weight, 152. No gastric symptoms, cough nor expectoration.

CASE VIII. R. S., a laborer by occupation; born in Ireland, aged 41 years. Came to Dispensary of the Albany Hospital January 8, 1896.

His *family history* was negative, except one son died of phthisis a year ago. Patient has always been strong and well. For the past two months has coughed and expectorated in the morning, and has morning vomiting. He has lost considerable flesh, and sleeps poorly on account of the cough. His appetite is poor.

Physical examination shows impaired resonance of both spaces, with harsh bronchial breathing. Some moist rales. Sputum contains tubercle bacilli.

January 15. Feels about the same, but complains of the loss of appetite, the disagreeable taste in the mouth and the morning vomiting. Advised lavage. *January 17.* Stomach washed out and a great deal of mucus removed. Ewald test meal. Acidity, 31. HCl. present. No lactic acid. *January 21.* Less mucus after lavage. Test meal removed shows acidity of 30. HCl. present. *February 4.* Patient complains less of the gastric symptoms and says that he knows it is doing him good, but seems no better. *March 10.* Unmistakable evidence of cavity in left upper lobe. Temperature, 11 A. M., 101°. Pulse, 104. Wants to have lavage. Stomach contents after test breakfast show acidity of 14. Trace of free HCl. Pepsin present. *March 28.* No free HCl. after test meal. No lactic acid. Pepsin present. *April 4, 1897.* The whole upper lobe of left lung shows dullness except over cavity. Coughs and raises a great deal. Sweats

at night. Ewald test meal. Contents of stomach show a trace of HCl. Pepsin present.

Patient died May 16th. No autopsy.

CASE IX. B. S., 37 years of age; born in Germany, married, and baker by occupation.

Family History: Maternal aunt died of lung trouble. On account of his work becomes overheated and catches cold easily. Has always drunk large quantities of beer, but never has been intoxicated. Has attacks of indigestion. During the attacks, he had a sense of fullness and pressure in stomach and at times would vomit large amounts of bitter, nasty tasting material. Two months ago caught cold, and since has been coughing. Has lost some weight.

Physical examination, February 7, 1896, shows some dullness, with crepitation at the inferior angle of right scapula. Voice sounds close to ear; otherwise lungs negative. Heart sounds and area normal. Stomach: marked dilation extending down to two finger breadths below navel. Splashing.

February 8. 2000 cc. of retained fluid withdrawn after night's fast. After test meal, acidity 7. No free HCl. No pepsin. Lactic acid present. Sputum contains a few tubercle bacilli. *February 15.* Condition about the same as at last examination. The gastric contents show a large amount of organic acids, including lactic and butyric, lactic acid bacteria; other bacteria; muscle fibres, starch granules and much mucus. *March 3.* Patient is doing badly. Coughs more. Sweats at night. Has hectic. Dullness at right apex. *May 18.* Patient died yesterday. Autopsy showed pulmonary tuberculosis; gastric dilatation, with ptosis; chronic gastritis.

CASE X. T. R. L., female, 18 years of age, who is attending school.

Family history shows that her father died of pulmonary tuberculosis at the age of 27. Her mother, at the age of 16, had a cough and was delicate for a year; since then takes cold easily, but is now in good health. Otherwise, the family history is negative.

On *September 12, 1895,* patient consulted me, complaining of being nervous, having headache and a craving for unusual articles for food. Is very partial to very sour things as pickles. Shortly after eating has severe pains in stomach, which do not radiate to the back, and vomits a sour acid material which "sets the teeth on edge." Is awakened at night with pain in stomach, which is relieved by food or vomiting. Menstruation irregular and scant. Some slight œdema of ankles. Bowels constipated. No cough nor expectoration. Dyspnœa on exertion.

Physical Examination: Patient looks chlorotic, the mucous membranes being very pale. The tongue is free from coating, pale and flabby, showing indentations of the teeth. The chest expansion is equal on both sides, but rather restricted. The heart sounds are normal, except "bruit diable" can be heard in the vessels of the neck, particularly on the right side; otherwise no abnormal sounds. Vomit examined shows HCl. present.

and a total acidity of 81. It contains some cocoa taken the morning before, starch cells, sarcinæ, and some bacteria. No lactic acid; no lactic acid bacilli nor blood.

September 13. The examination of the abdomen after the night's fast shows some epigastric tenderness, which is not localized. Gastric splashing present. The abdominal aorta throbbed with great force. Abdominal muscles tense. Urine shows nothing abnormal, except large amount of indican. After the night's fast, the stomach shows retention amounting to 350 cc. and contains a large amount of HCl., and shows the presence of some peas eaten two days before. Ewald test meal, which was removed an hour after, showed a lemon yellowish color with an acidity of 87. HCl. present. No lactic acid nor blood. Pepsin and rennin very active. Blood examination shows red blood corpuscles 4,200,000; hæmoglobin 60 per cent. Advised red bone marrow, raw meat sandwiches and eggs. On account of the constipation, the use of Carlsbad Sprudel salt was advised. In addition, lavage with alkaline solution every second day.

Diagnosis: Chlorosis; hyperchlorhydria; dilatation of stomach.

September 18. Has not vomited, but still has gastric distress. Test meal shows acidity of 88. Lavage with solution of nitrate of silver.

September 25. Is somewhat better. Still has pain in stomach. After test breakfast, the acidity was 76, and no lactic acid was found.

September 31. Has not vomited since the first day she came to the office, but still has some retention with the presence of HCl. after a night's fast. The acidity is 74 and the findings same as last report.

November 8. Physical signs about the same. Acidity 67. HCl. present. Subjectively is better. *December 6.* Has lost flesh; appetite is poor, and coughs a little in the morning; but does not complain of the burning pain in the stomach, and which frequently extended upward into the throat.

December 16. Think I can make out slight dullness at both apices. Sputum shows a few tubercle bacilli. *May 3, 1896.* Dullness at both apices positive, with evidences of apex 'catarrh at right apex. After test breakfast, acidity 43. HCl. present. No lactic acid.

November 7. Chest signs about the same. *Gastric Examination:* Acidity 31. HCl. present. Pepsin and rennin present.

January 16, 1897. Hectic marked. Temperature, 100.8°; pulse, 98. Area of dullness over both apices increased. Sputum contains tubercle bacilli.

January 17. Gastric examination shows acidity of 8. No HCl. nor lactic acid. Rennin present, together with much mucus. On the addition of HCl. very little peptonizing effect. *March 3.* Patient about the same. Gastric examination, made on account of nausea and anorexia, shows absence of HCl. and lactic acids. Pepsin and rennin present. Very much mucus.

April 4. Says she feels relieved after lavage, and, as she has a great deal of nausea with bad taste in the mouth, and no appetite, would like to have the stomach washed out. *April 15.* Patient has lost weight since last examination. Supraclavicular fossæ depressed. Otherwise no marked change. Stomach contents show an acidity of 6. No HCl. or lactic acids present. Pepsin present. Much mucus.

CASE XI. R. S., native of Russia, married, and a peddler by occupation. He is 47 years of age, and has suffered from "stomach trouble" for years. Everything he eats distresses him. He coughs and raises considerable mucus, especially in the morning. Came to the Dispensary of the Albany Hospital January 5, 1898. Examination of the chest showed depression of both supraclavicular and infraclavicular fossæ on both sides. Marked dullness over upper left lobe, except in the second interspace, where there is hyperresonance, together with cracked pot sound. Large and fine moist rales. Gastric contents, removed January 7 after a test breakfast, show acidity of 5; no HCl. or lactic acid. Some pepsin and rennin. Much mucus and saliva.

CASE XII. B. O. J., aged 32, married, and a brass worker by occupation. *Family history* shows mother and two sisters died of lung trouble, the last to die being a sister five years ago. Had measles and scarlatina when a child. Two years ago had a fever which was diagnosed as malaria, and later "lung fever." Since then "catches cold easily." Has much distress after eating. No vomiting.

Physical examination, June 20, 1897, reveals depression and impaired movement of upper half of the chest on the right side. Dullness over this area and many fine crepitant rales with a few larger moist rales. Voice sounds close to ear. Tubercle bacilli in sputum. Examination of gastric area shows tenderness. Some stasis. Gastric contents after test meal shows an acidity of 12, due to HCl. No lactic acid. Much mucus.

July 3. After test breakfast acidity, 14. Same findings. Patient is no better. *September 1.* Have heard that patient died of pulmonary hæmorrhage during last month.

That digestive disturbances are among the most common symptoms of pulmonary phthisis has long been a recognized clinical fact. That gastric disturbances may permit, by reducing the normal resistance of the individual, through faulty assimilation, infection by the tubercle bacillus is believed by the majority of clinicians, and has experimental data to support it. Louis and Andral referred to pretubercular dyspepsia. In 1855 Jonathan Hutchinson wrote an interesting and valuable paper on "The Form of Dyspepsia which Often Precedes and Attends Phthisis." In 1867, Thompson, in a paper on "Indigestion in Early Phthisis," opened by saying: "Deranged digestion is one of the most common deviations from health that ushers in tubercular disease." Hutchinson published a second paper in 1878, in which he analyzes a large number of cases, and shows that digestive disturbances precede tubercular infection in about one-third of the cases. On the other hand, Marfan found but five

cases of a total of sixty-one of tuberculosis in which gastric symptoms were present before evidences of lung involvement appeared. Bouchard has shown the liability to tubercular lung infection in those having gastric dilatation with its consequent autointoxication. Hayen has reported instances of pulmonary tuberculosis following gastritis. The state of the gastric secretions in tuberculosis has been carefully studied by Edinger, Ewald, Rosenthal, Klemperer, Einhorn and VanValzah, and others. Klemperer and Immerman have found hypersecretion of HCl. in early cases of tuberculosis. This agrees with the cases here reported, as of the five cases which gave neither physical nor subjective signs of tuberculosis when first seen, four had hypersecretion of HCl., and in one, No. IV, secretion was normal. Does irritation of the pneumogastric nerve in its distribution in the lungs bring about, reflexly, hypersecretion in the stomach? Or does the hyperchlorhydria depend upon a disturbance of the blood circulation in the stomach secondary to the morbid changes in the lungs for its causation? What the relation is of this hyperchlorhydria to incipient tuberculosis, or to a pretubercular state, further investigation must decide. It would certainly seem from the histories of these five cases that the gastric symptoms preceded the tubercular infection, although it is not certain that the stomach disturbance bears any etiologic relation to it; still the frequency of hyperchlorhydria in incipient pulmonary tuberculosis is suggestive.

Of the seven cases in which the diagnosis of tuberculosis was evident when the patient first consulted me, one case, No. VII, probably an early case, showed hyperchlorhydria. Two cases, which were also probably early cases, showed normal or nearly normal acidity. One, No. IX, in which the physical signs were slight, showed a total absence of hydrochloric acid, with the presence of organic acids, particularly lactic acid, and marked gastric dilatation. In three advanced cases, Nos. VIII, XI and XII, the acidity was below the normal when first examined, and in the one determination of No. XI HCl. was absent.

Of the cases longest under observation, as the cases progressed the amount of free HCl. lessened. This was particularly noticeable in case I, which showed

excessive hydrochloric acid secretion in six examinations, but a total absence of HCl. toward the termination of the disease. This may explain the diversity of results obtained by different observers, some having examined early cases, others those advanced. Comparative results to be valuable must cover the gastric examinations of the cases from their incipiency to the terminal stage, the progress of the tuberculosis seemingly inducing toward the later stages decrease of HCl. or its total absence, even in those which showed early in the disease hyperchlorhydria. As a practical point in the treatment of the gastric symptoms, we should not give drugs which increase the HCl. secretion, such as nux vomica or capsicum or add to it by prescribing HCl. dilute, simply because of anorexia or gastric distress, as this is no indication of the absence of hyperchlorhydria, and if it be present we increase the trouble.

In some of the advanced cases the stomach contents showed the presence of putrid sputa. In one instance the swallowed sputa, after sedimentation by the centrifuge, was examined and tubercle bacilli were found.

Einhorn has drawn attention to the evil effects of this swallowed sputa on the gastric mucosa by inducing gastritis, and its sinister effect on digestion, and he emphasizes the necessity of warning phthisical patients against its dangers.

Editorial

The Board of Governors of the Albany Hospital, under the direction of the Hospital Staff, will inaugurate during the summer a series of Clinical Days for practitioners of medicine. These Clinical Days will occur once a week and will consist of clinical lectures and demonstrations in general medicine, major and minor surgery, pathology, clinical microscopy and the specialties. An entire day each week will be thus occupied and an effort will be made to present the most valuable of the recent advances in medicine with cases illustrative of the different pathological conditions.

The work will be thoroughly practical and helpful and is especially designed for those who cannot take an extended

post-graduate course but are desirous of keeping in touch with modern medical progress as shown in a large, well-equipped hospital. The complete program will be published in the June ANNALS.

State Medicine

Edited by Harry Seymour Pearse, M. D.

THE DEATH OF THE ANTI-CHRISTIAN SCIENCE BILL

The Bell bill, which placed the Christian Scientists and osteopaths under the same legal restrictions as others who desire to practice medicine in the State of New York, lies buried in the Public Health committee of the Assembly under an avalanche of amendments, which, if they had prevailed, would have defeated the original purpose of the bill.

The opposition was so strong that the bill could not have passed without these amendments and the adherents should feel that, under the circumstances, the final disposition of the measure is a fortunate result as far as they are concerned. The general feeling in the Legislature this year has been against medical restriction acts and, on the whole, the Christian Scientists and osteopaths have come out ahead. The numerous hearings and resulting newspaper reports were the best possible advertisements for them and the publicity undoubtedly helped rather than injured their cause. The result was not altogether unforeseen by many.

There are a few conclusions to be drawn from the controversy over this bill: First, it is doubtful whether there is wisdom in trying to control the practices of the Christian Scientists by legal means; agitation and discussion seem to accentuate their importance and increase their power. This effect has been apparent this winter at least. It is unfortunate but certainly true. Second, it ought to be possible to convict for the abuses and criminal acts of these people through the present medical laws, but this has been tried many times and always failed. Third, if restrictive legislation of this character is to be attempted again, *unity* of action, purpose and feeling of the medical profession throughout the State will be necessary, as the full power of its social and political influence will

be required to accomplish anything in this direction; resolutions from every county society, every representative body of physicians in the State and the personal influence of the physicians with the members of the law-making branches of the government.

Is the game worth the candle and are the principles underlying this bill sufficiently important to insure that unity? If we look at it from a high moral standpoint, a position which cannot be reached by legal enactment alone, Yes. If agitation is to act as a boomerang and increase the power of this sect rather than control its practices, No.

IMPORTANT MEDICAL BILLS IN THE NEW YORK LEGISLATURE

Assembly Bill No. 2364. Introduced by Mr. Henry. An Act: "To amend the Greater New York Charter, relative to coroners."

This measure abolishes the office of coroner in the city of Greater New York and provides for the appointment of medical examiners who shall serve for a term of seven years, who shall be reputable physicians and shall have been in the active practice of their profession for at least five years and whose salary shall be \$5,000 a year. The recorder of the city of New York shall appoint four for the borough of Manhattan and two for the borough of the Bronx; the judges of the county court of Kings shall appoint three for the county of Kings; the judges of the county of Queens shall appoint two for the county of Queens and the county judge of the county of Richmond shall appoint two for the county of Richmond. It shall be the duty of any citizen to report a case of death under suspicious circumstances to the police department, which department shall notify a medical examiner and delegate a police officer to investigate the case and who shall remain under the orders of the medical examiner until he shall have completed his examination or autopsy. If death is found to be due to natural causes the medical examiner shall make his report to the police department, which department shall file the report with the health department within twenty-four hours. If a crime is suspected, the medical examiner shall send one report to the district attorney

and another to the police department. Said medical examiner shall have power to take ante-mortem statements. He shall also take charge of all property found on a body. He shall be allowed \$1,000 a year for telephone and necessary expenses. If he deem it necessary he shall apply to the district attorney for permission to employ a chemist. This act shall take effect January 1, 1902.

Two years ago coroner's juries were abolished in this State and this admirable measure is another movement along the line of good government and according to the sentiments expressed by the last constitutional convention, which were to the effect that the office of coroner should be abolished. The lay press is active in its denunciation of the present system. According to a recent strong editorial in a New York paper, "The office (of coroner) is conspicuously out of place in a modern, progressive administration of public affairs. Its functions are two-fold: first, to ascertain the cause of death, and, second, to determine if a crime has been committed, and if so, to bring the criminal to justice. Obviously the first is a medical and the second a police function. They are totally different and the average coroner is qualified for neither. The one calls for a physician, which the coroner is usually not, and the other falls within the province of the police detective service and public prosecutor."

We regret that the bill was presented so late in the session. The chances of its getting through this year are very slight, but it is only a question of a few years when the purpose of this measure shall be realized.

Assembly Bill No. 2482. Introduced by Mr. Morgan. Senate Bill No. 1479. Introduced by Mr. McCabe. An Act: "To amend the public health law, in regard to the right of the regents to admit to examination in certain medical studies."

This bill contains the following amendment to the existing laws controlling the State medical examinations:—"The regents may in their discretion admit conditionally to the examination in anatomy, physiology and hygiene, and chemistry, applicants certified as having studied medicine not less than two full years of at least nine months each, including

two satisfactory courses of at least six months each, in two different calendar years, in a medical school registered as maintaining at the time a satisfactory standard provided that such applicants meet the first, second and third requirements."

It gives the regents discretionary power to divide the examinations so that at the end of two years the student can pass off a certain number of his subjects. The faculties of some of the colleges have found that the students were overburdened during their final college year in preparing to meet the regents' examinations in subjects which they had completed two years previously. The bill emanates from the faculty of the Long Island Medical College and we understand that it is favored by the various college faculties and the regents.

Assembly Bill No. 2055. Introduced by Mr. Schneider. An Act: "To authorize Theodore J. Vogelgesang to practice medicine in the State of New York."

Provides "that Theodore J. Vogelgesang be and is hereby authorized to practice medicine within the boundaries of the State of New York except of surgical operations and narcotic remedies, without passing the necessary regents' requirements as now provided by law."

This little bill, which has been in the Legislature before, was the incentive for a scathing editorial in the *New York Tribune* for March 29th, against the principle and precedent which it involved. During the winter a large number of bills have been introduced creating lawyers, but this is one of but two bills exempting an individual from the medical examinations required by law. The debates on some of the bills exempting certain men from the bar examinations indicated that many of the members of the Legislature were opposed to the State requirements in law and medicine and considered them unjust and severe. The statement was made on the floor of the Assembly that the legal and medical professions in this State were "trusts" pure and simple. The criticism by the *Tribune* was timely and just and shows that the folly of such special legislation is apparent to those outside the legal and medical worlds.

Assembly Bill No. 2056. Introduced by Mr. Waite. Senate Bill No. 1195. Introduced by Mr. Audett. An Act: "Making an appropriation for the quarantine stations at Hoffman and Swinburne Islands."

Appropriates \$159,072 or as much of that sum as necessary for specified improvements at the said quarantine stations.

Assembly Bill No. 2006. Introduced by the Committee on Affairs of Cities. An Act: "To amend the public health law in relation to tenement houses."

Provides that the State Health Commissioner shall have power to examine into the enforcement of the laws relating to tenement houses in any city of the first class. Whenever required by the governor, he shall make such an examination and shall report the results thereof to the governor within the time prescribed by him therefor.

This bill passed both houses with a number of other "tenement house" bills providing for the improvement of the tenement houses and tenement house districts in large cities.

Senate Bill No. 1144. Introduced by Mr. Slater. An Act: "To amend section 394 of the penal code."

Amends the penal code by making any person guilty of a misdemeanor who goes on board of or has any communication or intercourse with any vessel at quarantine, or with any of the crew or passengers of such vessel without the permission of the health officer, and every person who, without such authority, enters the quarantine grounds or anchorage; and provides for the fine or imprisonment or both of person convicted.

Senate Bill No. 1165. Introduced by Mr. Malby. An Act: "To amend the insanity law, known as chapter 545 of the laws of 1896."

Gives the State Commission in Lunacy power to secure from the estate of poor or indigent insane confined in State hospitals reimbursement for care and treatment while in such institution.

Assembly Bill No. 2481. Introduced by Mr. Bryan. An Act: "To amend section 18 of chapter 21 of the laws of 1896, entitled 'An act providing for commutation of

sentences for good behavior of convicts in the prisons and penitentiaries in this State,' relative to insane criminals."

Provides that the insane convicts confined at Dannemora and Matteawan may have their sentences commuted for good behavior if such sentence is for less than one year.

Senate Bill No. 1186. Introduced by Mr. McKinney.

Assembly Bill No. 2053. Introduced by Mr. Robinson.

An Act: "Permitting the civil service commission to certify for appointment any physician in the State hospital's service who shall have served in such position for three years."

This bill has been introduced in the interest of one person and if passed would enable him to be promoted without taking the civil service examination required by law. The principle involved in the bill and the bill itself are opposed by the State Lunacy Commission.

Senate Bill No. 1322. Introduced by Mr. McEwan. An

Act: "Authorizing, directing and empowering the city of Albany, to alienate certain lands now held by it for park purposes."

This bill authorizes the city of Albany to grant a piece of land adjoining the Albany City Hospital to the "Albany Hospital for Incurables" for the purpose of erecting a hospital thereon. Since the bill was introduced it has been found, however, that the City Hospital had an easement upon the land described in the bill and it is probable that the land in the western part of the city already purchased by the trustees of the Hospital for Incurables will be used for their new hospital.

It is to be regretted that this hospital must be situated so far away from the center of things. The region about the Albany Hospital should be used for hospitals and educational institutions. It is an ideal site for such a purpose and there is always a distinct advantage in the centralization of institutions of this character, especially if they are used for teaching purposes as they are in this instance. While it would establish a bad precedent to take from the Albany Hospital, or any other institution, in fact, land previously granted to it,

there is in this case no apparent necessity for such an action, as there is plenty of available land in the immediate vicinity which would probably be acceptable for the Hospital for Incurables.

Senate Bill No. 1431. Introduced by Mr. McCabe. An Act: "To protect the public health by regulating the teaching and practice of hypnotism and mesmerism."

Section 1. Neither hypnotism nor mesmerism shall hereafter be taught within this State, except in schools, colleges or other educational institutions, which shall maintain for such purpose standards of education therein approved by the regents of the University of the State of New York, and all such schools, colleges or educational institutions shall be under the control and supervision of said regents and subject to the provisions of the university law so far as the same may be applicable.

Section 2. No person shall practice hypnotism or mesmerism hereafter, except duly licensed and authorized physicians and surgeons, unless duly graduated from such a school, college or educational institution, after a full course of study therein and the registration of his certificate of graduation or diploma therefrom in the office of the clerk of the county wherein he shall so practice.

Section 3. Any person, who shall violate the provisions hereof, shall be guilty of a misdemeanor.

Assembly Bill No. 2520. Introduced by Mr. Burnett. An Act: "To amend section 16 of chapter 545 of the laws of 1896, known as the 'insanity law' in reference to the pathological institute."

The State Lunacy Commission may appoint a director of the pathological institute who shall perform, under the direction of the commission, such duties relating to pathological research as may be required for all of the State hospitals for the insane. His office and laboratory shall be in the city of New York. He shall receive an annual salary to be fixed by the commission, subject to the approval of the governor. The commission may provide accommodations in the city of New York for a limited number of alleged insane and insane persons for special treatment in connection with

the pathological institute, and make proper provision and regulations for the reception, care and treatment of such patients.

This pathological institute was established in 1896. It is under the control of the State Lunacy Commission and is carried on in connection with that of the State Hospitals for the Insane and is one of the first institutions established in the United States for the single purpose of scientific investigation and supported by the government.

Public Health

Edited by Joseph D. Craig, M. D.

DEPARTMENT OF HEALTH—CITY OF ALBANY, N. Y.

ABSTRACT OF VITAL STATISTICS, MARCH, 1901

Consumption	24	Penitentiary	0
Typhoid fever	1	St. Margaret's Home	2
Scarlet fever	0	Little Sisters of the	
Diphtheria	2	Poor	2
Chicken-pox	0	Home of the Friend-	
Whooping-cough	0	less	0
Cholera infantum	0	Home of the Aged	0
Measles	1	Hospital for Incura-	
Erysipelas	1	bles	1
Influenza	10	Albany Orphan Asy-	
Small-pox	0	lum	2
Pneumonia	17	Child's Hospital	1
Broncho-pneumonia	10	St. Agnes' School	1
Apoplexy	8	House of Good Shep-	
Bright's disease	12	herd	1
Cancer	9		
Accidents & violence	4	Total deaths	164
Seventy years & over	26	Rate	18.55+
One year or under	27	Rate last year,	
Albany City Hospital	8	same month	19+
St. Peter's Hospital	3	Births	114
Homeopathic	3	Marriages	34
County House	4		

BACTERIOLOGICAL FINDINGS IN DIPHTHERIA

Boston Medical and Surgical Journal

Hibbert Winslow Hall says that the relation of the Board of Health to the patient showing a positive culture is comparatively simple. It does not take the position that a sick person is necessarily suffering from the disease of diphtheria simply because a positive culture has been obtained, although this is usually true. The Board does insist, however, that such a person is a nucleus from which the bacilli may be spread, and remains such until the bacilli disappear. The patient may be harmless, despite the positive culture, if the bacilli in his throat or nose are not actively producing poisons. But it being impossible to apply the methods for determining that the bacilli fail to produce toxins, in many cases, the Board feels justified in assuming that those cases are virulent, on the strength of very much evidence which shows that the error involved in this assumption is small.

COMPULSORY VACCINATION

A decision in regard to the right of the State to pass laws requiring the vaccination of children as a condition to their attending the public schools has been made recently in the State of Pennsylvania.

The father of the child that was denied admission to the public school on account of not being vaccinated in accordance with the rules of the Board of Education and an act of the Legislature, brought a mandamus suit in the City of Philadelphia. The Court of Common Pleas maintained the right of the Board of Education to demand such vaccination, and, on appeal, the Supreme Court sustained the ruling of the lower court in the following terms: "We think that the court below did not err in the ruling referred to. In the case, *Duffield versus Williamsport School District*, we hold that school directors in the exercise of a sound discretion may exclude from the public schools pupils who have not been vaccinated." Whether a resolution, excluding from the schools pupils who have not been vaccinated, is a reasonable one is to be judged of in the first instance by the school directors. In the present state of medical knowledge and of

convincing opinion of those having charge of the public health, the courts will not say that such a resolution is the best of official discretion.

Astonishing as it may seem a small majority of the public, including some physicians, deny the efficacy of vaccination as a precaution against small-pox. The following figures, taken from a paper on the "Importance of Vaccination" by Dr. Wilhelm Carl Kubin of New York City, may be of interest:

Jenner announced the principle of protective vaccination about the year 1798; before that time small-pox was a scourge all over the world and several times had almost depopulated the countries of Europe. In 1802, four years after Jenner had made public his discovery, a committee of the House of Commons thoroughly investigated the subject and succeeded in finding only two cases in which small-pox had occurred after having been properly vaccinated.

In Copenhagen, with over 100,000 inhabitants, where vaccination was universally practiced, not a single death from small-pox was recorded during the 13 years, 1811 to 1823.

In Auspach, Bavaria, with a population of about 300,000, no deaths from small-pox took place in the 9 years from 1810 to 1818.

Of more than 250,000 people vaccinated in France between the years 1804 and 1812 seven were known to have contracted variola.

In Sweden, before the introduction of vaccination, the annual death-rate from small-pox was 20.50 out of over a million of population, while during the 40 years, 1810 to 1850, it was but 1.58, and in Westphalia, where the death-rate from small-pox was formerly 26.43 per million, between the years 1816 and 1850 it fell to 1.14, and in Bohemia, Moravia, Austria, Silesia it was reduced from 4000 to 200, in Copenhagen from 3128 to 286, and in Berlin from 3422 to 176.

During Mr. Marson's term of 30 years in the London Small-pox Hospital 15,000 cases of variola (small-pox) were under his charge; his statistics prove that the unvaccinated died at the rate of thirty-five per cent., while the presumably vaccinated died at the rate of six and one-half per cent.

When small-pox prevails in a community, while some are protected and others not protected, the influence of vaccination is most strikingly shown. Thus in an isolated part of Bombay, 1848 to 1853, the small-pox deaths among the general population, the majority of which was unprotected, were fifty-eight per cent. of the mortality over all cases, but among the European residents, mostly protected by vaccination, the small-pox deaths were, for the same periods, but one per cent. of the deaths from all causes. In observations made for 21 years on four millions of people in Bohemia, it was discovered that the death-rate among vaccinated persons who contracted small-pox was five and one-sixteenth per cent. while on the other hand the mortality of those who contract small-pox twenty-nine and four-fifths per cent.

Nothing more clearly exhibits the efficacy of vaccination and re-vaccination than the medical record of the Franco-Prussian War. At that time, according to Dr. Welch, small-pox prevailed to an alarming extent, and both armies were fully exposed to the contagion; but the German mortality was only 263 men, while the French mortality was 23,468, although the latter army was at no time more than half the size of the former.

In no country is vaccination carried on with greater care and fairness than in Germany. Husson and Bousquet were the first to recommend re-vaccination * * * .

It was in Prussia that re-vaccination was first practiced in a way that brought conviction of its value. In that country all soldiers were re-vaccinated. During the period from 1834 to 1848, out of 425,000 cases of re-vaccinations, positive results were obtained in 198,000, 46.58, in these years (14) there were but 77 cases of variola and varioloid in the army and among them not a single death.

In 1843 small-pox was epidemic in Prussia, but in the entire army there were but 12 cases.

In Prussia the mortality from small-pox in 1835 was 27 per 100,000; in 1872 it was 262 per 100,000. In 1874 vaccination and re-vaccination became obligatory and the mortality fell at once to 3.60, and in 1886 it was only .39 per 100,000. In 1886 there were 197 deaths from variola in the entire German Empire; in 1887 there were 168, in

1888 there were 112, in 1889 there were 200, in 1890 there were 58, while in 1891 there were but 40 deaths. The number of deaths from this disease in France was 56 times greater, in Austria 60 times greater, and in Italy 97 times greater.

In 1898, 92 cases of small-pox were reported in the United States army with 23 deaths, and in 1899, 347 cases with 84 deaths; the total of 439 cases, with 107 deaths during the two years. Of these cases, 342 with 99 deaths occurred in the Philippines, the fatal cases constituting twenty-nine per cent. of the total number. 72 cases with 3 deaths occurred in the United States, the total cases constituting only 4.17 of the total number.

That the regular troops were better protected from the infection of small-pox than the volunteers is shown by the prevalence of the disease among the troops in the Philippines, where large mixed commands of troops operated during the whole year in a largely infected country. Among the mean strength of 22,922 regulars there occurred 110 cases, of which 23 proved fatal, while among the volunteers with a mean strength of 16,358 there occurred 157 cases, 55 of which were fatal.

The death-rate among the regulars was only one per cent. per thousand men, while among the volunteers this rate was 3.36 per thousand.

SHIELDS FOR VACCINATION

At a meeting of the Medical Society of the County of New York during the month of April, Dr. Shields, Dr. Huddleston and Dr. George H. Fox (the skin specialist), and Dr. Allen vigorously opposed the use of shields for small-pox vaccination. This has also been the experience of the Albany Department of Health. The shield apparently keeps the underlying tissue moist and secondary infections are more common in their case. The pressure of the shield on the surrounding tissue interferes, in the opinion of some of the authorities, with the vitality of the parts and the vaccination area does badly.

SMALL-POX IN THE UNITED STATES

On March 1 the following are some of the States reporting small-pox. These figures are taken from the reports of the Marine Hospital Service.

	This year.	Last year.
Alabama	42	115
California	14	3
Colorado	732	18
Florida	55	16
Illinois	155	60
Indiana	2	82
Iowa	5	24
Kansas	869	263
Louisiana	97	1,810
Massachusetts	7	7
Minnesota	1,220	60
Mississippi	4	303
Nebraska	517	39
New York	174	9
North Carolina	157	274
Ohio	461	184
Oklahoma	690	55
Pennsylvania	42	17
Texas	412	297
Utah	406	16
Wisconsin	303	7

All States reporting 7,454 this year, last year 4,869.

SMALL-POX AND DEATH

The last report issued by the United States Marine Hospital Service shows that from December 28, 1900, to February 8, 1901, there were 4,359 cases of small-pox in the United States, with 55 deaths; the figures for the corresponding period of the previous year were 2,026 and 67 respectively. This shows quite a difference in the death-rate—one of the lowest of any extended epidemic. Doubtless this is due to a general vaccination which has been in progress for some months. It is quite probable that if vaccination and re-vaccination were systematically done annually this disease would in time become extinct. This has been demonstrated

in many localities where the only occurrence of small-pox was due to importation from without.—*American Medicine*, April 6.

SANITARY PROGRESS IN HAVANA

Most interesting returns in regard to sanitation come from the City of Havana, Cuba. The sanitary department, under the direction of Dr. W. C. Gorgas, Major and Surgeon, U. S. A., has adopted the Bertillon system for the classification of diseases.

The death-rate for the month of February, 1901, was 19.32; the death-rate for Albany, N. Y., during the same month being 15.94. In February, 1898, the last of Spanish rule, the death-rate was 82.32 per thousand. During February, 1900, there were 17 new cases of yellow fever; in February, 1901, 8 new cases.

Besides disinfecting the houses with formaline and other disinfectants, the rooms occupied by yellow fever patients are screened as soon as the case is reported and all mosquitoes in the building are killed with the fumes of pyrethrum powder, and all places where mosquitoes can breed throughout the building are covered with kerosene oil. All mosquitoes in the adjoining buildings are killed in the same way.

THE MORTALITY OF CONSUMPTION

“Compared with consumption all the pestilences that send nations shivering to their prayers—cholera, yellow fever, small-pox, the bubonic plague—are the mild pastimes in which death indulges when he has nothing serious on hand. In some regions consumption takes off a fourth of the people that die from all causes combined. Eradicate that and you add years to the average plan of human life.”—*Michigan Bulletin of Vital Statistics*, February, 1901.

In the City of Albany over two hundred die from consumption every year. About fifteen per cent. of all the deaths are from this disease. Or to put it in another way, one out of every six or seven deaths is from consumption. In the face of such statistics it seems as if the time was ripe for a general movement looking to the stamping out of this preventable disease. A more general report of cases of consumption on the part of the profession is desirable.

In Memoriam

WYLLIS F. WOOD, M. D.

Dr. Wyllis F. Wood, of the class of 1874, Albany Medical College, died at his home in Rensselaer, N. Y., April 11, 1901, aged 49 years. Dr. Wood's modest character was shown in his report to the class historian in 1884, in which he said: "I find, in thinking it over, little that will interest you; in fact, nothing but the hard work of a good, general practice, and the results a fair success."

Medical News

Edited by H. Judson Lipes, M.D.

ASSOCIATION OF THE ALUMNI OF THE ALBANY MEDICAL COLLEGE.—The Alumni Association of the Albany Medical College will hold its twenty-eighth annual meeting May 1, 1901. The decennial classes, '51, '61, '71, '81, '91 and '76, will have reunions and receive the reports of their class historians. '51 and '61 will meet in the Chemical Laboratory, '71 in Chemical Lecture Room, '76 in Amphitheatre, '81 in Recitation Room A, '91 in Recitation Room B.

The following program has been arranged: 10:00 A. M.—Reception in Library. Reunions of Decennial Classes. 10:30 A. M.—General Alumni Meeting. Faculty address of welcome, by Prof. CYRUS S. MERRILL, M. D.; reports of Class Historians; Miscellaneous business; President's address; election of officers. 3:00 P. M.—Commencement exercises at Odd Fellows' Hall. Address by Rev. WALLACE BUTTRICK, D. D. 8:00 P. M.—Alumni dinner at Hotel Ten Eyck.

MEDICAL SOCIETY OF THE COUNTY OF ALBANY.—A regular meeting of the Society was held April 10, 1901, in Alumni Hall. The meeting was called to order at 9:10 P. M., the Vice-President, Dr. Martin MacHarg, in the chair. The following members were present: Drs. Blessing, Blumer, Carroll, Hale, L., Hale, W. S., Le Brun, Lomax, MacFarlane, Moore, C. H., MacHarg, Mosher, Hinman, Myers, Neuman, Pearse, Root, Smith, J. E., Traver, Vander Veer, E. A., Ward, Woodward, H. A.

1. Reading of the minutes of the last meeting.

Dr. WARD moved that the minutes be adopted as printed in the ANNALS. The motion was seconded and carried.

2. There were no minutes of special meetings.

3. There were no proposals for membership.

4. No reports or resolutions were presented.

5. No special communications.

6. Reading of papers.

Dr. PEARSE read a paper on "The Relation of the Sympathetic Nervous System to Functional Amblyopia."

The President announced that Dr. Pearse's paper was open for discussion.

Dr. MOORE stated that cases of amblyopia, with lesion, are very interesting. They were not very rare, but the cases often very obscure. He had read, not long since, a report of three cases by Hubbell, of Buffalo. In one case there had been blindness for five weeks, and in the same eye there was a lack of secretion in the lachrymal gland. He thought this indicated an involvement of the sympathetic nerve. He reported a case of his own which was of interest. There was, apparently, passive amblyopia in one eye. It began with severe pain over the eye, and when the patient was seen three months later she was apparently blind. Dr. Moore was able to convince himself by tests that the blindness was only apparent. He also reported a second case of hysterical amblyopia in an anæmic woman, which began with great pain over the eye, and which yielded, in three weeks, to strychnia and electricity. There were no changes of the fundus in either case.

Dr. EDGAR A. VANDER VEER then read a paper on "Report of a Case in which a Scarf Pin was Swallowed and Passed per Rectum on the Seventh Day."

The President declared Dr. Vander Veer's paper open for discussion.

Dr. ROOT said that he had seen the case with Dr. Vander Veer, and that Dr. Vander Veer was to be congratulated upon the result. The reason why the pin took seven days to pass did not seem very clear. Whether it remained in the stomach for a time or in the intestine was a question. Luckily it was passed head first.

Dr. SAUTTER then read a paper on "Report of Two Cases of Extra-Genital Chancre."

The President declared Dr. Sautter's paper open for discussion.

Dr. W. S. HALE then read a paper on "A Single Experience with Von Ruck's Tuberculinum Purificatum."

The President declared Dr. Hale's paper open for discussion.

Dr. WARD asked Dr. Hale whether the patient had had any other treatment than the tuberculin, in the way of cod liver oil, etc.? Dr. Hale replied that no other treatment had been given. Dr. Ward made inquiry as to the febrile reaction after the administration of tuberculin. Dr. Hale replied that when the dose of two milligrammes was reached the patient had fever. The fever was not observed in Von Ruck's tuberculin.

Dr. MACFARLANE said that the case seemed to him like one of lupus. It was a well-known fact that lupus did better under tuberculin than any other form of tuberculosis. The tuberculin was still given in many of the German clinics for lupus. A great many cases improved, but the question was whether the improvement was lasting.

Dr. SAUTTER asked Dr. Hale regarding the dose of iodide which had been given to the patient. Dr. Hale replied that from twenty-five to thirty grains, four times a day, had been given.

Dr. ROOT stated that he had some experience with Von Ruck's tuberculin when it first came out. He also stated he had seen this case and was one of the gentlemen who was mistaken in the diagnosis. His

experience with tuberculin, in lupus, corresponded with Dr. MacFarlane's. He recollected one case, in a young girl, in which the lesion had been curetted thirty or forty times without effect, where there was great improvement in the lesion under tuberculin. He did not regard Dr. Hale's case as one of lupus, as there was too much involvement of the bony structure. At the time he saw the case the lesion looked like a specific one. He thought that the dose of iodide given was too small. He would have given as high as seventy-five grains four times a day.

Dr. HALE mentioned a case of pulmonary tuberculosis treated by the use of Von Ruck's watery extract. The case had lasted some three or four months, had a cough, night sweats, and emaciation.. After six months' treatment with the watery extract the patient gained six pounds in weight, and the cough and expectoration had ceased.

Dr. WARD referred to the fact that Dr. Trudeau was still using tuberculin in peculiar cases. He did not recall at the moment just what class in cases Dr. Trudeau used the treatment in, but he knew they were peculiar. In his last report he reported thirteen cases treated by tuberculin with quick results. Dr. Ward said he considered Dr. Root's dose of iodide of potash as too large.

A motion to adjourn was made and seconded.

GEORGE BLUMER, *Secretary*.

MARTIN MACHARG, *Vice-President*.

THE ALBANY GUILD FOR THE CARE OF THE SICK POOR: STATISTICS FOR MARCH, 1901.—Number of new cases, 60. Classification of cases, district, 42; dental, 1; dispensary case receiving home care, 1; moderate income, 16. Classification of diseases, medical, 40; surgical, 8; maternity, 7, with 3 on waiting list; gynæcological, 1; eye and ear, 1. Five patients removed to the City hospital; one transferred to the Homœopathic hospital. Cases were reported to the Guild by the city physician, by 3 of the health physicians and by 17 other physicians.

NEW YORK STATE DEPARTMENT OF HEALTH: FEBRUARY BULLETIN.—The State Department of Health has been established by Chapter 29 of the Laws of 1901, to take the place of the State Board of Health, which is thereby set aside, the Department of Health succeeding to its powers and functions. Instead of the State Board of Health provided for by the Public Health Law, the present law, which is an amendment of it, provides for the office of Commissioner of Health, who is made the head of the Department of Health, and vested with all the general powers and duties of the former Board of Health, the terms of which, under this law, have expired.

Dr. Daniel Lewis, of New York City, has been appointed to the office of Commissioner of Health, and has entered upon his services as such, as the head of the State Department of Health. The headquarters of the department and of the commissioner continue to be in the Capitol, at Albany.

There were thirty-five deaths from smallpox during the month, of which thirty-two occurred in New York City, two in Watertown and its environs, and one in Luzerne. During the month of March about eighty cases of smallpox have been reported up to near the end of the month in the metropolis. In Watertown (and Glen Park adjacent) an extensive outbreak began the middle of December, but is under control. It spread to nine other towns from there. At Luzerne, Warren county, the fatal case was one of two that developed in January.

Of recently developing cases, there have been seventeen localities in which during the month of March (to the 25th) smallpox has appeared: in Mount Vernon, Yonkers, Fishkill, Peekskill and at Croton Dam near Peekskill, each two, all probably traceable to New York; in Ballston Spa, two, and Ephratah, Broadalbin, Northville, each one, and the town of Fulton, Schoharie county, three, besides two of earlier occurrence, probably traceable to Gloversville; in Syracuse, two in March and five earlier; Little Falls, Fort Plain, Rome, one each, and the town of Stockbridge, in Madison county, four, the origin of all of which is not clear, but no doubt traceable to older foci, as possibly Schenectady; and in Elmira and Niagara Falls each one case of the disease. In Albany also one case occurred during March, the sixth of scattered cases developing since November. There is a recent not fully confirmed report of cases in Wells, Hamilton county. These seventeen places include all in which smallpox has broken out freshly since the first of March. The following places, where earlier than March smallpox appeared, are free from it: Utica, Starkville, Herkimer, Eden, Hudson, Waterford, Caldwell, Luzerne, Sandy Hill, Edinburgh, Johnstown, Mohawk and Bleecker; in most of these places there was a single case only and there was no continued epidemic. Sharon Springs is also free, and the neighboring town of Cherry Valley, where over twenty cases occurred and whence there was spread to other towns, is likewise clear of a somewhat protracted epidemic.

As has been previously reported in the *Bulletin* and by circular letters to health officers, smallpox was brought into the State after a period of practical freedom from it last November by a traveling troupe and left at Albany, where but a single case occurred, at Schenectady and Gloversville, both of which had extensive epidemic from which they are not yet free, and whence distribution elsewhere occurred. Glens Falls and Watertown, becoming infected in December, and the disease not soon recognized, have likewise, especially the latter, had extensive epidemics and been centres for its spread, and they have not yet reported themselves free from smallpox. The towns about Watertown, of Philadelphia, Alexandria, Norfolk, Gouverneur, Rutland, Champion and Brownville, in the last of which especially there were many cases, all of which were reached by the disease in January, are now probably all free from it. There are now in the State, outside of New York City, about fifty cases of smallpox distributed in the various localities enumerated. There is no place where a prolonged continuance of the disease is probable.

Vigilance is necessary on the part of health officers to secure early control of smallpox. In a large majority of the places it has reached, the

first case has been recognized, and there has been no spread. It has always spread where it has escaped diagnosis, as in some of these places, for weeks; even though mild, it has been a costly experience in such cases.

THE ORGANIZATION OF THE NEW YORK STATE NURSES' ASSOCIATION.—A New York State Nurses' Association, whose purpose shall be to raise the status and promote the interests of the nursing profession in this State, was organized April 17, in the council chamber of the City Hall. A preliminary meeting was held on the previous afternoon with Miss Sylvén V. Nye, of Buffalo, chairman, and Miss Christina Hall, of Jamestown, secretary. A committee of nine was appointed to draft a constitution and by-laws, which was submitted to the meeting Wednesday morning at 9 o'clock, for further action, when officers were elected. The committee on constitution and by-laws consists of Miss Nancy E. Adams, Utica; Miss Emily J. MacDonnell, Albany; Miss Anna Damer, Buffalo; Miss Elizabeth C. Sanford, Miss Eva Allerton, Rochester; Miss Spencer, Miss Margaret Anne Soule, Miss Anna Lowell Alline, New York; Miss Lillie L. Waterman, Brooklyn. Four members of the committee are superintendents of nurses' training schools.

The trained nurse is rapidly superceding the irresponsible "Sairy Gamp," and the ultimate object for which the nurses are organizing is (as outlined by the chairman, Miss Nye, in her speech to the meeting), to secure legislation which shall give such State recognition and regulation to the nursing profession as has been secured by the medical, legal and pharmaceutical professions, and for which architects and other organized professional bodies are now striving. It includes State registration of graduate nurses, with four necessary provisions, as briefly outlined by Miss Nye: First, uniform entrance examinations for training schools; second, uniform curriculum for training schools; third, uniform final examinations; fourth, no hospital to be provided with a training school for nurses unless such hospital shall have the proper facilities for the regulation course of training. The very frank and full discussion of the two methods of State organization—first by individual membership, and second by local club representation—was led by the chairman, Miss Nye, who favored individual membership, and Miss Lavina L. Dock, who favored county organization. There were nearly sixty nurses in attendance, representing the best-known training schools and hospitals of the United States, including those of New York, Brooklyn, Philadelphia, Chicago, Boston.

The chairman transmitted to the Assembly, on behalf of the board of managers of the Albany Hospital Training School for Nurses, an invitation to a reception to be given in honor of the visiting nurses at 5 o'clock at the home of the president, Mrs. William L. Learned, No. 298 State street. The meeting adjourned to meet at 9 o'clock A. M. on the following day in the council chamber.

The reception at the home of Judge and Mrs. Learned was a very pleasant social affair, and afforded opportunity to the Albany Hospital Training School authorities to give greeting to the visiting nurses from other

training schools of the State. Miss MacDonnell, superintendent of the local training school, also extended an invitation to the nurses to inspect the new Albany hospital, one of the finest institutions of its kind in this country, and to visit the Nurses' Home.

The second and final meeting for organization was held Thursday at 9 A. M., in the common council chamber of the City Hall, when a tentative constitution was adopted and the following officers were elected: President, Miss Sylveen V. Nye, Buffalo; first vice-president, Miss M. Isabel Merritt, Brooklyn; second vice-president, Miss Anna R. Young, New York; secretary, Miss Elizabeth C. Sanford, Rochester; treasurer, Miss Mary E. Thornton, New York. Miss Thornton is secretary of the Associated Alumnae of Trained Nurses of the United States. The working constitution, which will undoubtedly be enlarged, provides that the name shall be the New York State Nurses' Association. The purposes of the association are: The advancement of the educational standard of nursing; the furtherance of the efficient care of the sick; the maintenance of the honor and character of the nursing profession; the furtherance of cordial relations between the New York State nurses, also with the nurses of other states and countries. The Misses Palmer, Damer, Dock, Hall and Davids were appointed members of a committee to confer with the officers of the association in the preparation of a new constitution and by-laws.

Before adjournment it was decided to hold the next meeting in Buffalo in September. A vote of thanks to Mrs. Learned and the patronesses of the Albany Hospital was passed for the entertainment provided by them Tuesday. A group picture was taken in front of the City Hall after the meeting adjourned.

"RUDOLPH VIRCHOW FUND." —To the American Medical Profession:

On October 13, 1901, Rudolph Virchow will be eighty years old. When he completed his seventieth year, a fund was started in his honor, to enable the great master to facilitate scientific research by establishing scholarships, and by encouraging special medical and biological studies. Contributions to that "*Rudolph Virchow Fund*" were furnished by those in all countries interested in progressive medicine, as a homage to the man whose name is always certain to arouse admiration and enthusiasm.

In Berlin a large committee, containing, amongst others, the names of A. Bastian, v. Coler, A. Entenbug, B. Fraenkel, O. Israel, Fr. Koenig, C. Posner and W. Waldeyer, has been formed to call for contributions which are to be added to the original "*Rudolph Virchow Fund*," so as to increase its efficiency. The committee expresses the opinion that in no better way, and in none more agreeable to the great leader of modern medicine, can his eightieth birthday be celebrated, and asks for the sympathy and co-operation of all those engaged in the study and practice of scientific medicine all over the globe.

The undersigned have formed a sub-committee for the purpose of making the American profession acquainted with the intentions of the Berlin committee, and urge their colleagues to participate in honoring the very

man who has done more, these fifty years, than any other to make medicine a science, and international.

Subscriptions should be sent to their secretary, who will receipt therefor.

CHARLES A. L. REED,
President of the American Medical Association.

HENRY P. BOWDITCH,
President of the Congress of American Physicians and Surgeons.

WILLIAM K. WELCH,
Johns Hopkins University.

ROBERT F. WEIR,
President of the New York Academy of Medicine.

A. JACOBI, *Secretary,*
110 West 34th Street, New York.

NATIONAL ASSOCIATION FOR THE STUDY OF EPILEPSY.—The first annual meeting of the National Association for the Study of Epilepsy and the Care and Treatment of Epileptics will be held in Washington, D. C., May 14 and 15 next. Many papers of value from European and American students, and full reports of the progress that is being made in the care and treatment of epileptics in this country, are promised for this meeting. The president of the association is Hon. Wm. P. Letchworth, LL. D., Portage, N. Y.; first vice-president, Frederick Peterson, M. D., New York City; secretary, Wm. P. Spratling, M. D., Craig Colony, Sonyea, N. Y.; either of whom, upon request, will give further information of the coming meeting.

AMERICAN ACADEMY OF MEDICINE.—The 26th annual meeting of the American Academy of Medicine will be held at the Hotel Aberdeen, St. Paul, Minn., on Saturday, June 1, 1901, at 11 A. M. (executive session, the open session beginning at 12 M.), and continuing through Monday, June 3. The principal features of the meeting will be a Symposium on "Institutionalism;" and another on "Reciprocity in Medical Licensure." Series of valuable papers on both topics have been promised, as well as interesting papers on some other subjects. The president's address (Dr. S. D. Risley, of Philadelphia,) will be delivered on Saturday evening, June 1, and the annual social session held on Monday evening, June 3. Members of the profession are always welcomed to the open sessions of the academy. The secretary (Dr. Charles McIntire, Easton, Pa.,) will be pleased to send the program, when issued, blank applications for fellowship, etc., when requested to do so.

AMERICAN MEDICINE: DR. GOULD'S NEW MEDICAL WEEKLY.—On April 6th appeared the initial number of Volume I of *American Medicine*. This weekly has been founded and is owned and controlled by the medical

profession of *America*. Dr. George M. Gould is editor, and Mr. H. D. Reynolds, manager. The new journal owes its inception to the expressed wishes of many physicians in all parts of the country. The American Medicine Publishing Company has been legally incorporated with a capital of \$250,000. The *Founders' shares* and the *Preferred shares* have all been subscribed for and only a limited number of shares of common stock may still be purchased. The organization of the company is such that a majority of the stock can never be secured by any publisher or lay-capitalist, or by any combination of such interests. The success of this journal is assured by the great number of founders and stockholders. The general plan of this new journal is similar to that of the *Philadelphia Medical Journal*, which Dr. Gould also established. The editorial pages appear first followed by "Book Reviews," "American News and Notes," "Foreign News," and "Correspondence." Then appears the "Original Articles" department, the first article of which is by Dr. William Osler, on "The Medical Aspects of Carcinoma of the Breast, with a Note on the Spontaneous Disappearance of Secondary Growths." Other papers are contributed by Dr. John B. Deaver, of Philadelphia; Dr. A. M. Phelps, of New York; Dr. H. A. Hare, of Philadelphia; Dr. Frank Billings, of Chicago; Dr. E. E. Montgomery, of Philadelphia; Dr. William Keiller, of Galveston, Texas, and others. A department of "Practical Therapeutics" is under the charge of Dr. A. A. Stevens. "The World's Latest Literature" merits careful reading, as the list of collaborators assures the excellency of this important department.

DETROIT MEDICAL JOURNAL.—The publication is announced of the new *Detroit Medical Journal*, by the J. F. Hartz Co., Detroit, Mich. The editorial management will be in the hands of Dr. G. A. Stockwell, (A. M. C. 1866) well and favorably known as an author and editor in connection with medical, lay and scientific literature, including the *Scientific American* and *Analytical and Critical Cyclopædia of Practical Medicine*.

AN AMERICAN EDITION OF NOTHNAGEL'S ENCYCLOPEDIA.—W. B. Saunders and Company announce the early publication of the "most practical part" of *Nothnagel's Encyclopedia of Practical Medicine*, under the editorial supervision of Dr. Alfred Stengel. An innovation is promised in permitting the purchase of single volumes, without forcing the subscription for the entire system. We hope that the further liberality of the German publisher, in preparing the *fasciculi* of the separate articles for sale, may be eventually adopted in this country.

THE ST. PAUL MEETING AND YELLOWSTONE PARK.—Arrangements have been completed for an excursion of the members of the American Medical Association to Yellowstone Park. The Committee of Arrangements has finally succeeded in persuading the officials to open up the park a week earlier than usual in order to accommodate the Association. A special train will be run from St. Paul to the Yellowstone Park, and the railroad officials

have promised to do everything in their power to make it satisfactory to all concerned. The rates will be very low, but how low can not at this time be definitely stated. Those who attended the meeting in 1882 will remember with much pleasure a similar excursion that was run at that time, and these will not need to be informed that the one now proposed will be full of enjoyment. Further announcements will be made later. The Yellowstone National Park contains more natural wonders than are to be found elsewhere in the world, and this will be a rare opportunity for our Eastern friends to see what this portion of our Great West possesses.

PERSONAL.—MARRIED: COLE—COOPER.—At Albany, N. Y., April 17, Dr. CHARLES GRAY COLE (A. M. C. '97), of Binghamton, N. Y., and ANNA J. COOPER, of Albany. Since graduation, Dr. Cole has established an excellent practice in Binghamton, where he and Mrs. Cole will reside.

—Dr. WILLIS G. MACDONALD (A. M. C. '87), will deliver the address to the graduating class of the Medical College of Virginia at its coming commencement, to be held in Richmond, May 9th, 1901.

Book Reviews

Introduction to the Study of Medicine. By G. H. ROGER. Authorized Translation by M. S. GABRIEL, M.D., with Additions by the Author. New York: D. Appleton & Co., 1901.

Realizing the immensity of the territory and the diversity of the subjects now coming under the head of medicine, the University of Paris instituted a few years ago a course of lectures Introductory to the Study of Medicine. The formulation and delivery of this course was put into the hands of Professor Roger, and this book represents the lectures of 1897-98 with the additions necessary to bring them up to date. The book opens with an introductory chapter, which is mainly taken up with definitions of disease, health and the various ordinary medical terms, an understanding of which is necessary to the intelligent appreciation of the rest of the book.

The author then takes up the various etiological agents causing disease, first the mechanical, then the physical and finally the vital, and explains their main characteristics and methods of action. Following on these chapters naturally come chapters bearing on the method of reaction of the organism, the various disturbances in function following on disease. Then come considerations of disturbances in structure and finally chapters on the evolution of disease, the examination of the patient and the diagnosis, prognosis and treatment of disease.

The work throughout shows an essentially logical method of treatment and covers a very wide subject in a manner which amply demonstrates the author's extensive acquaintance with medical thought and medical literature.

Almost of necessity a few minor errors have crept in here and there. It is stated that when the intestine is punctured by a needle, no fluid escapes; this is certainly contrary to the ordinary belief. The old statement that

malaria is propagated by the air is adhered to. Other statements could be mentioned which, whilst they cannot be absolutely demonstrated to be false, are not by any means generally accepted. For example, the author speaks of herpes zoster twice as a disease of definitely proven infectious origin.

Occasional errors in spelling occur, as acetic for ascitic and Lee-Medfort for Lee-Metford. The translator seems on the whole to have done his work well, he has avoided too literal a translation and has yet retained the sense of the original.

The book-work and type are good.

The book can be recommended, not only to students, but also to practitioners in medicine, as giving a wide and philosophical view of medicine and its tendencies at the present day.

G. B.

Comparative Physiology of the Brain and Comparative Psychology.

By JACQUES LOEB, M.D., Professor of Physiology in the University of Chicago. Illustrated. New York: G. P. Putnam's Sons; London: John Murray. 1900.

Professor Loeb states in a few words what a great many men have thought for a great many years, that "metaphysicians employ the wrong methods of investigation and substitute a play on words for explanation by means of facts." He seeks to establish certain facts by scientific investigations upon the action of nervous matter, and to avoid, as far as possible, any assumptions not borne out by these facts. The first eight chapters describe his observations upon the causes and nature of reflex actions in the lower forms of life, including medusæ, ascidians, actinians, echinoderms, worms, arthropods and mollusks. He shows, it appears conclusively, that ganglionic nervous structures are not necessary to these movements, but that the apparent reflex is in reality nothing more than a manifestation of properties common to all protoplasm, as irritability and the power of conducting stimuli. The protoplasm thus has the power of responding to certain stimuli, as light, or heat, or electricity. These inherent properties, which have often been vaguely described as instincts, are known as tropisms, as heliotropism, chemotropism, geotropism, stereotropism, etc. The flight of a moth into the flame for instance, is simply an instance of heliotropism, the surface of the moth having an inherent affinity for heat and light. The following chapters contain the author's speculations upon the significance of these phenomena, and their application to the laws of life, especially of the higher orders. The tropisms and the reflexes explain in great measure the source of what have been called instincts, and he makes the instinct thus a purely material physiological function. He describes it as a higher order of reflex, to which he applies the term "purposeful reflex." He thus depreciates the distinction now generally accepted by neurologists between reflex and inhibitory acts, as the two sole functions of nervous matter, a distinction which was concisely formulated by Meynert, who admitted no instincts, and upon which the whole structure of Hughlings Jackson's studies is established. He then discusses heredity, showing the transmission of certain nervous properties, and finally treats of the relations of the cerebral hemispheres to "associa-

tive memories," or consciousness. He believes that associative memory is the fundamental process of all psychic phenomena, and that only certain species of animals possess associative memories, and have consciousness, and these animals only after a certain development has been reached, thus "putting an end to the metaphysical idea that all matter, and hence the whole animal world, possesses consciousness." This purely material reasoning admits no free will, although the author does not deny personal responsibility; it is possible and necessary to so train the associative memories of the young as to prevent wrong doing.

Professor Loeb's work is one of "The Science Series," the object of which is not the familiarizing of the laity with the different departments of science, but rather the intercommunication of these departments with each other. The work under consideration will appeal to specialists in the nervous system more especially by reason of the clear exposition of the tropisms, which the author has so carefully studied and so lucidly explained.

A Text-Book on Practical Obstetrics. By EGBERT H. GRANDIN, M. D. Gynecologist to the Columbus Hospital; Consulting Gynecologist to the French Hospital; Late Consulting Obstetric and Obstetric Surgeon to the New York Maternity Hospital; Late Obstetrician of the New York Infant Asylum; Fellow of the American Gynecological Society, of the New York Academy of Medicine, of the New York Obstetrical Society, etc., etc., with the collaboration of GEORGE W. JARMAN, M. D. Gynecologist to the Cancer Hospital; Instructor in Gynecology in the Medical Department of the Columbia University; Late Obstetric Surgeon of the New York Maternity Hospital; Fellow of the American Gynecological Society, of the New York Academy of Medicine, of the New York Obstetrical Society, etc. Third Edition, Revised and Enlarged. Illustrated with Fifty-two Full-Page Photographic Plates and One Hundred and Five Illustrations in the Text. 6½x9½ inches. Pages xiv-511. Extra Cloth, \$4.00, net; Sheep, \$4.75, net. F. A. Davis Company, Publishers, 1914-16 Cherry Street, Philadelphia.

Grandin and Jarman's *Obstetrics* is a manual for the student and practitioner, and is confined to the actual needs of practical midwifery. Theoretical considerations are avoided as far as possible, and general embryology, pathology and allied sciences are omitted, the presumption being that knowledge of these had already been acquired, and that other general works may be better used for reference. The volume is divided into four parts, dealing respectively with Pregnancy, Labor, The Puerperal State and Obstetric Surgery. It is clearly and concisely written, and may be commended. The full-page illustrations are half-tone reproductions from photographs, many of them showing distinctly methods of procedure; a few, as, for instance, "the dressing of the umbilical cord," and "the auscultation of the foetal heart," seem to be superfluous. The index may be criticized, as not complete. Printing and binding are well done. The brevity and conciseness of the work render it valuable, and will sustain for it a place, which has already created a demand for a third edition.

ALBANY MEDICAL ANNALS

Original Communications

THE RELATION OF THE SYMPATHETIC NERVOUS SYSTEM TO FUNCTIONAL AMBLYOPIA.*

By HARRY S. PEARSE, M. D.,

Albany, N. Y.

In reviewing the literature considerable confusion is noticed in the use of the terms "Amblyopia" and "Amaurosis," and only in recent years has the distinct line which divides them been generally recognized though not always adhered to. Though there is some difference in the views concerning the application of the terms, with most observers, the derivations Amblyopia, from ἀμβλῦς, blunt, and ὥψ, sight, and Amaurosis from ἀμαυρός, dark, form the basis of a classification which is simple and yet allows little latitude for complex amplification. Amblyopia is designated to those cases of weak sight which cannot be relieved by glasses, no matter what the cause may be. Amaurosis applies to all cases of absolute blindness, temporary or permanent, whether due to functional or pathological change in any structure concerned in the visual act; thus blindness due to hysteria is called hysterical amaurosis and that due to cerebral lesion, cerebral amaurosis. And this sub-classification prevails right through, each form of amblyopia or amaurosis receiving its name according to its causal factor. Of the amblyopias there are: congenital amblyopia, dimness of vision from time of birth and in the majority of cases due to high degrees of refractive error; amblyopia ex-anopsia, dim vision from non-use as in a squinting eye; hemeralopia, dimness of vision at night only and its

*Read before the Medical Society of the County of Albany, April 10, 1901.

opposite, nyctalopia, dimness of vision during the day but normal at night; reflex amblyopia, due to irritation in another part of the body; traumatic amblyopia; uraemic, glycosuric, malarial, anaemic amblyopia, dependent respectively upon these general conditions; toxic amblyopia, from the use or abuse of drugs; and the amblyopia of central origin, due to brain lesion and with which there may be a gradual failure of vision accompanying a descending degeneration of the optic nerve, ending in atrophy of that nerve and total blindness. Hemianopsia, a blindness of one-half of the field of vision indicates a disturbance in the brain or some part of the visual tract. Many of the above amblyopic conditions may and do progress to total blindness, the quantity of vision present determining the class to which each belongs. This aphorism can be applied to every case where there is sub-normal visual acuity. In addition to these conditions of amaurosis following amblyopia, there are a number of cases of total blindness which do not have a common etiology with the amblyopias, viz.: color blindness; scotomas, which may be scintillating or black areas in the field of vision, and monocular blindness as the result of an embolism or thrombus of the central artery of the retina.

There is a very large group of cases, including all degrees of acuity of vision, the etiology of which is still a matter of controversy. I refer to the disturbances of vision accompanying hysteria and neurasthenia. To say that a case of amaurosis is "hysterical" or that an amblyopia is "neurasthenic" does not indicate a definite pathological basis of diagnosis and for want of a better or more descriptive scientific term these conditions are called "functional," which means, as expressed by Fuchs¹, "an altered condition of circulation and nutrition resulting in disturbance of function." It has been conclusively proved that the sympathetic nervous system plays an active part in the control of the functions of the secretive glands and of the arterial circulation; also in the visual act through its influence over the muscles of accommodation. Strümpell² and other writers maintain that vaso-motor irritations may proceed from the cerebrum, as in flushing and pallor from mental emotions. If this is so, the word "functional" bears the burden of many of the intricate and evasive phenomena of the neuroses and psychoses.

And there can be no doubt that many cases of diminution of visual acuity are due to the influence of the central nervous system upon the cellular elements of the retina, but in just what manner it is not positively known. The eye-ground in the majority of cases presents no visible abnormality to assist us. Severe shock or violent mental emotions in the form of grief, joy, anger, fright, etc., have produced complete blindness, undoubtedly by paralyzing the retinal elements or the visual centers in the cortex, rendering them incapable of receiving or interpreting visual impressions. Whether or not the sympathetic is concerned in this action we cannot say, but there certainly is a suspension of the functional activity of these elements (the retina or visual centers). Based on the study of 7,500 cases Connor³ makes the statement that "there is no positive evidence of the existence of amblyopia from suppression, viz.: a loss of sight from the inhibitory action of the brain upon the visual center." It is true that the suppression theory is based on negative evidence, but it is the most plausible thus far advanced and must be considered until more positive knowledge is forthcoming. Baas⁴ reports a case of amaurosis following the blepharospasm of phlyctenular conjunctivitis in a child. The patient died of pneumonia. Upon autopsy there could not be found any microscopical lesion of the optic tract or visual centers. He regarded the condition as probably functional.

There are, however, many cases of amblyopia and amaurosis, functional in character, which *can* be explained upon a firm anatomical and physiological basis; cases where there is a visible contraction of the blood-vessels of the retina traceable directly to the influence of the sympathetic.

Anatomical connection between the central sympathetic system and the arteries of the retina and the muscles of accommodation.

From the cavernous plexus of the sympathetic, located on the internal carotid artery, have been traced distinct fibrous ramifications to the vessels of the retina, to the motor and sensory nerves supplying the internal and external muscles of the eye-ball and the muscles of the eye-lids. It is not within the scope of this paper to consider at any length the distribution of the sympathetic to the external muscles or the lid.

The intercommunicating branches of the third, fourth, fifth, sixth and seventh nerves, in and about the orbit, form a complicated mesh which can only be understood by following out the branches of each individual nerve and of the attending ganglia. In visual disturbances accompanying affections of these nerves, their origin, or any tissue in relation to them, communication can, in the majority of cases, be traced between the eye and the point of lesion. In affections of the third, fourth and sixth, the connection is apparent, but when of the fifth or seventh it is not so easy to trace; however, it can usually be worked out. All of these nerves contain sympathetic filaments and their areas of distribution are therefore subject to the influence of that system.

The distribution of the sympathetic to the vessels of the fundus oculi and the internal ocular muscles is mostly through the medium of the ciliary ganglion, situated within the orbit, very close to the optic nerve and directly anterior to the sphenoidal fissure. This ganglion receives its motor root from the third, its sensory from the fifth and its sympathetic root from the cavernous plexus of the sympathetic and, according to some observers, a filament from Meckel's ganglion. It supplies nerves of sensation to the eye-ball, motor filaments to the ciliary muscle and sphincter of the pupil, sympathetic filaments to the radiating fibres of the iris; and according to Brunton⁵, *sympathetic filaments to the vessels of the eye are given off from the sympathetic nerve before it reaches the ciliary ganglion.* Tiedeman⁶ also says, *that a small filament penetrates the optic nerve with the arteria centralis retinæ.*

Physiological action of the sympathetic in the eye.

The vaso-constrictor and dilator actions of the sympathetic are as yet not fully understood. Experiments upon animals have shown that stimulation of the vaso-motor fibres terminating in the arterioles of a gland will dilate those arterioles and increase the secretion of that gland; that stimulation of the fibres to the arterioles of the skin will contract them and produce pallor. Section of these fibres will in each case have directly the opposite effect, i. e., diminution of glandular secretion and flushing of the skin, showing that in the glands vaso-dilator fibres prevail and in the skin vaso-constrictor.

The action of the sympathetic on the internal muscles of the eye and the circulation of its lining tunic is very interesting. In the head the vaso-constrictor fibres predominate over the vaso-dilator. The vaso-constrictor fibres ending in the structures of the eye can be traced down to the upper thoracic ganglion and stimulation will produce a contraction of the blood-vessels of the iris. This same stimulation, however, will produce dilatation of the pupil; whereas section of these fibres has a directly opposite effect, dilatation of the vessels of the iris and contraction of the pupil. So, as far as it is at present known, the influence of the sympathetic upon the structures of the eye is exerted, to a great extent, through its action on the blood-vessels. The fact that sympathetic filaments to the vessels of the fundus have been traced by Brunton and Tiedeman, together with our knowledge of the influence of the sympathetic upon the capillaries of the skin, leads to the most reasonable inference that the capillaries of the fundus would be subject to the same influence of the sympathetic as the capillaries of the skin; especially so as vaso-constrictor fibres predominate in the sympathetic nerves of the head and of the skin.

Application of knowledge of anatomy and physiology of the sympathetic to the diagnosis of functional visual disturbances.

Collins and Fraenkel,⁷ in a recent paper, maintained that they had proved experimentally that the functional nervous disorders were "primarily conditioned through the sympathetic system, and were the result of a trophic disease." In discussion Worcester said that the sympathetic was probably less concerned in functional disorders than the cerebro-spinal system, and Osler said that it (the paper) was an "exhibition of a retrograde tendency." In closing, Collins asked the question, "How are variations in blood-pressure brought about: does the cerebro-spinal system send any filaments to the blood-vessels?" There is the situation—on one side justifiable conclusion based on anatomical knowledge and physiological experiments; on the other, the cellular activity or influence incidental to abnormal nervous or psychic processes.

The functional disturbances of vision with which we are here particularly concerned are positive conditions—disor-

dered states of the retinal or vascular elements of the eye or both, caused by a change in the innervation of these structures; which change may be due to an irritation of the innervating channels or to the influence of the cells in the brain, themselves disturbed by psychic processes. These irritations and disturbances act as direct causes of amblyopia and amaurosis, though in the majority of cases they produce no visible change in the retina, or in the vessels of the fundus. On the other hand, according to Barrett⁸ and other observers, in several instances contracted blood-vessels have been seen. Noyes⁹ reported a case in which a man of fifty-five, while talking, gradually lost the sight of both eyes; upon examination twenty-four hours later, the retinal arteries were nearly empty and thread-like. Complete recovery of vision followed in five minutes under inhalations of amyl nitrite, which restored the calibre of the retinal arteries. Whether this drug acts by paralyzing the muscular coats of the arteries or has a sedative action on the vaso-constrictor fibres of the sympathetic is a matter of controversy. H. C. Wood¹⁰ favors the latter view and has many followers. Benson¹¹ reports a case of temporary obscuration of vision with spasm of *one* of the retinal vessels, and states that "spasm of the retinal vessels is sufficient to arrest the circulation and cause blindness." Spasm of these vessels rarely produces permanent blindness, however, because the retina is partially nourished by the choroid.

Strümpell follows up each symptom of spastic hemicrania and traces it to an *irritation* of the sympathetic; also, each symptom of paralytic hemicrania and traces it to a *paralysis* of the sympathetic, adding that when the eye is involved the vessels supplying the retina are affected as shown by spots and bright scintillations before the eyes, scintillating scotomas and hemianopsia. Von Graefe's symptom in exophthalmic goitre (lagging of the upper lid when the pupil is directed downward) is explained by that observer as due to the spasmodic contraction of the involuntary fibres of Müller which aid in raising the eye-lid and receive their nerve supply from the cervical sympathetic. The same irritation which produces this spasm may act on the vaso-constrictor fibres terminating in the retinal vessels and which can be traced, as above

shown, to the same source, the cervical portion of the sympathetic. Brailey and Eyre¹² report five cases of exophthalmic goitre with increased intraocular tension, limitation of field of vision and amblyopia, assigning the probable cause of these conditions to the nervous and vascular disturbances at the root of the disease. Many observers advance the theory that the etiological factor of exophthalmic goitre is an affection of the cervical sympathetic ganglion. In simple glaucoma the extirpation of this ganglion has its foundation in the theory that an irritation of the sympathetic produces an increased arterial tension in the fundus with resulting venous stasis and increased secretion of intraocular fluids which Donders describes as a "neurosis of secretion."

The contraction of the retinal arteries, produced by the action of quinine and acetanilid and that of functional anæmia are analogous, with the same result, transitory diminution of vision. The condition is one of mechanical anæmia. Non-oxygenated blood will also produce transitory blindness by irritation of the vaso-motor centers. On the other hand, the temporary blindness following excessive hemorrhage is due, not to any change in the vessel walls, but to the insufficient blood-supply to the retina and nerve centers.

A large proportion of the cases have, as I have said, the obscure etiology, hysteria, and it remains for the pathologist or neurologist to determine the basic cellular changes in this disease. Dana¹³ has reported forty-five cases of hysteria, twenty-three of which presented marked ocular symptoms, the most characteristic one being a concentric limitation of the visual field. This condition is due, I believe, to one of two conditions or both; a diminished sensitiveness of the rods and cones in the periphery of the fundus to external impressions, or a lessening of the interpreting power of the central visual areas. Nuel¹⁴ has reported sixteen cases of what he called sympathetic amblyopia with absence of visible ophthalmic signs, following corneal injuries from flying scraps of metal. I have recently had under observation a case similar in character, where there was sudden and absolute blindness developed a week after injury to the cornea by a piece of metal. Complete restoration of vision followed inhalations of nitrite of amyl and hypodermic injections of

nitrate of strychnine. In this case there was, however, a recognizable contraction of the retinal arteries. The cases of Nuel and my own case were undoubtedly of a reflex nature in which the sympathetic played the part which is generally attributed to it in all reflex conditions. In another recent case, a very hysterical woman who complained of violent periodical head-aches, there was a well marked anæmia of the temporal half of the optic nerve and retina of the right eye. This shows that all of the arteries of the retina need not necessarily be affected.

Conclusions.

Our knowledge of the manifold manifestations of the disease, hysteria, in every structure of the body will not permit us to say positively that the retinal elements, the conducting channels of visual sensation or the visual centers themselves are free from the influence of this disease. The effect upon the visual apparatus of fright, shock, emotion, mental exhaustion, over-exertion, etc., is essentially the same as in hysteria and whether the sympathetic is concerned in this action is yet a question.

In view of the known sphere of action of the sympathetic and of the many cases observed which present the same conditions in the vessels of the fundus which the influence of the sympathetic produces elsewhere in the body, if the sympathetic does not influence the fundus vessels, what does? Until a more plausible source of influence is positively demonstrated we cannot do better than accept this explanation which is far removed from a theory.

BIBLIOGRAPHY

1. FUCHS. *Text-Book of Ophthalmology*, 1899, page 495.
2. STRÜMPPELL. *Text-Book of Medicine*, page 553.
3. CONNOR. Amblyopia from Suppression, Congenital Imperfection or Disease Which or All? *Journal of the American Medical Association*, Vol. XXX, page 203.
4. BAAS. *Münchener medicinische Wochenschrift*, Jan. 24, 1899.
5. BRUNTON. *Lectures on the Actions of Medicines*, 1898, page 239.
6. TIEDEMAN. Quoted in Gray's *Anatomy*, page 723.
7. COLLINS AND FRAENKEL. *Journal of Nervous and Mental Diseases*, January, 1899.
8. BARRETT. *Intercolonial Medical Journal of Australasia*, 1897.
9. NOYES. Case quoted in Loring's *Ophthalmoscopy*.
10. H. C. WOOD. *Practical Therapeutics*, Foster, Vol. I. page 59.
11. BENSON. *Transactions of Eighth International Ophthalmological Congress*.
12. BRAILEY AND EYRE. *Guy's Hospital Reports*, 1897, page 65.
13. DANA. *New York Medical Record*, 1898, Vol. LIV, page 852.
14. NUEL. *Annals de la Soc. Med. Chir. de Liege*, January, 1897.

ASSOCIATION OF THE ALUMNI OF THE ALBANY
MEDICAL COLLEGE—TWENTY-EIGHTH ANNUAL
MEETING.

The twenty-eighth annual meeting of the Association of the Alumni of the Albany Medical College was held in the Alumni Hall on Wednesday, May 1, 1901. The usual informal reception was held in the college library, where photographs were exhibited and greetings exchanged, between the hours of 9 and 10:30 A. M. Provision for the reunion of the decennial classes had been made by the assignment of the various rooms of the college for the separate classes, and before the general meeting the classes of '81 and '91 met for the reports of the class historians and for renewals of college acquaintance. The annual meeting was called to order by the President, Dr. Thomas D. Crothers ('65), of Hartford, Conn., at half past ten o'clock.

The following members of the Association, with invited guests, students of the college and others interested were present: J. J. Buckbee, ('41); H. D. Didama, ('46); William Frederic Holcombe, ('49); A. Ennis, ('55); M. Felter, ('59); A. Van der Veer, ('62); A. B. Husted, ('63); T. D. Crothers, ('65); L. Hale, ('68); W. H. Murray, ('69); D. C. Case, W. G. Tucker, ('70); G. L. Ullman, ('71); D. H. Cook, ('73); H. E. Mereness, ('74); C. C. Schuyler, ('75); E. D. Fuller, H. Lilienthal, G. P. K. Pomeroy, W. O. Stillman, ('78); W. J. Nellis, ('79); C. B. Herrick, ('80); N. A. Caldwell, F. L. Classen, Nelson Everest, J. H. Mitchell, ('81); G. J. Holmes, W. B. Sabin, W. W. Scofield, ('82); J. F. Reilly, T. F. C. Van Allen, ('83); R. Babcock, M. A. Wheeler, ('84); T. L. Carroll, E. H. Rider, ('85); W. G. Macdonald, A. MacFarlane, C. H. Moore, H. F. C. Muller H. C. Young, ('87); C. F. Clowe, E. E. Potter, ('88); J. M. Mosher, J. E. Smith, ('89); W. H. Happel, A. G. Root, ('90); W. H. Conley, R. B. Lamb, L. LeBrun, ('91); W. G. Lewi, L. H. Neuman, H. S. Pearse, C. R. Seymour, ('92); T. W. Jenkins, ('93); J. R. McElroy, C. H. Travell, ('94); J. C. Sharkey, H. L. K. Shaw, ('96); H. J. Lipes, G. W. Timmers, ('97); R. W. Andrews, R. A. Kirkpatrick, E. A. Van der Veer, ('98); E. G. Hinman, ('99); G. Lenz, ('00); C. J. Baum, A. J. Bedell, G. S. Burns, J. W. Burns, R. B. Castree, J. A. Cox, T. E. Deveny, J. H. Dingman, E. G. Griffin, J. M. Griffin, E. J. Hannan, C. K. Haskell,

2d, J. F. Heffernan, A. F. Holding, T. F. Judge, J. E. Kelley, J. W. Moore, J. B. Neary, D. D. Parrish, N. A. Pashayan, W. B. Rosecrans, C. L. Sicard, G. A. Smith, M. J. Thornton, J. Wachsmann, M. Wachsmann, L. O. White, C. L. Witbeck, ('01); C. S. Merrill, S. B. Ward, (Hon.).

The President introduced Professor C. S. Merrill, M. D., who delivered the following address of welcome to the alumni on behalf of the college faculty:

ADDRESS OF WELCOME

Mr. President and Gentlemen of the Alumni Association:

Through the kindness of my associates in the faculty, it again becomes my duty, as it is my pleasure, to welcome you back to this annual reunion, and, in behalf of your *alma mater*, to extend to you the right hand of fellowship and cordial greeting, to share with you, in joy and pleasure, your professional success and triumph, to sympathize with you in your trials and afflictions and to wish you God-speed in all worthy efforts in our noble profession.

These annual reunions should be much like the Thanksgiving homecoming of our New England States, where all the younger members of the family return to the parental roof, contributing with joyful greetings and happy reminiscences to the glad reunion.

We would ask that these reunions be productive of more than a feeling of social pleasure.

From such a gathering of her children—educated men—your *alma mater* has a right to expect something—some idea or suggestion that may be of permanent value to the college and thus of value to succeeding classes, and to the profession at large.

We ask you to study the curriculum as now offered for the four-years course and to make suggestions and criticisms that may occur to you, assuring you that they will be gratefully received and carefully considered.

The effort is being constantly made to bring the student in closer contact with the disease studied, and dividing the class into small groups and their enforced attendance, under competent instructors, at the various large dispensaries of the city, have resulted in giving the students a most valuable course in the diagnosis and treatment of the various diseases.

During the past year a plan has been devised and put in operation whereby every member of the senior class has an opportunity to serve—in fact, is obliged to serve, for a few weeks, in our several large hospitals as a student under the attending physicians and surgeons, thus not only becoming familiar with the symptoms, diagnosis and treatment of the cases in the hospital, but also is obliged to personally make urinary analysis, blood counts, bacteriological cultures, examinations, etc.

Such a course the faculty feel is of invaluable benefit to the student.

While the opportunities for special study have been greatly enlarged, it is not our expectation or desire to produce specialists; but rather to so

educate the young gentlemen you send us that they may become competent general practitioners of medicine and surgery—good family physicians, and if any of them would be specialists in any department, that must and should come from years of post-graduate study and experience.

It seems hardly possible that twenty-five years have passed since the speaker and several others of your present faculty were first honored by appointment as professors in this college; but such is the fact—the college year just closing completes our twenty-five years of service.

These twenty-five years have witnessed great changes in our course of study, which has been constantly increased, enlarged and perfected, and we are proud of the fact that during all those years the Albany Medical College has been at the very forefront, working for higher medical education and higher requirements for entrance to the profession—which action should and, we believe, does receive your hearty commendation.

During these twenty-five years one thousand and eighty-seven students have been graduated from this college, and the uniformly high and honorable positions they have taken in the profession is a source of gratification to their instructors and is an honor to this Association, of which every graduate of this college should be an active, enthusiastic member.

To-day we take pleasure in presenting to you, for membership, a class of twenty-eight young gentlemen, who have completed the prescribed course of study and, having passed a satisfactory examination, have been recommended to the trustees for the degree of Doctor in Medicine.

Their gentlemanly conduct, high scholarship and conscientious performance of college duties make us feel certain that they will win success and prominence in their chosen profession, adding new honors to their *alma mater* and this association.

To you, young gentlemen, who are so soon to go forth to fight the battle of life, I would give as a watch-word to be inscribed upon your banners the one word, *duty*.

Study well to learn your duty, to Him who created you, to the loving ones in the home circle, to your fellows in the profession, to the patient who entrusts you with his very life, to the community in which you may live, and to all the interests of that community, and having learned your duty in all these various relations, *dare* to do it.

“——— under every century’s changing sky
Shall the Greek master triple signal fly,
Faith, Honor, Duty—Duty calmly done.
That shouts no self-praise o’er a victory won.
One bugle note our only battle call;
One single watchword, Duty;—that is all.”

On motion of Dr. Robert B. Lamb, the thanks of the Association were tendered Professor Merrill for his interesting address.

On motion of Dr. D. H. Cook, the reading of the minutes of the last annual meeting was dispensed with, and the minutes as printed were adopted.

Dr. W. G. Tucker moved that the President appoint a committee of five to nominate officers for the ensuing year. Carried. The President appointed as such committee: Drs. W. G. Tucker, ('70); D. C. Case, ('70); W. J. Nellis, ('79); J. H. Mitchell, ('81); and H. J. Lipps ('97). The committee retired.

The Recording Secretary presented the

REPORT OF THE EXECUTIVE COMMITTEE AND RECORDING SECRETARY

Two meetings of the Executive Committee have been held during the year. At the first meeting, on May 7, 1900, the recording secretary presented the records of the last annual meeting of the Association, including an account of the commencement exercises, and, on motion, this was referred to a committee of printing. The retiring treasurer, Dr. Van Allen, presented a report, showing a balance on hand of \$236.79. Dr. Root presented a report on behalf of the alumni dinner committee, from which it appeared that the receipts from the sale of 104 tickets were \$156, and the disbursements were \$250.04, leaving a deficit of \$94.04, which had been paid by the college faculty. Dr. Root also presented a report upon the cost of the entertainment of the Albany Hospital on alumni day, showing the amount to be \$99. The following resolution was adopted:

"Resolved, That the Executive Committee regret that the class historians appointed for the annual meeting did not submit the usual histories of the decennial classes."

At a meeting held February 15, 1901, the distribution of the Proceedings of the last annual meeting was reported. Fifteen hundred and fifty copies had been printed and mailed to members of the Association whose addresses were known.

The usual arrangements for alumni day were discussed and the chairman appointed the following committees: On Alumni Dinner, Drs. Tucker, Bendell, MacFarlane; Toasts and Speakers, Drs. Mosher, Vander Veer, Root; Reception Committee, Drs. Pearce, Richardson, Moore, George, MacHarg, Hennessy, Rider, Babcock and Mereness. The treasurer announced that the treasury was depleted, the balance remaining being only thirty-one dollars. The historian announced that he had the names of twenty alumni and the records of sixteen who had taken part in the Spanish-American war, and a committee was appointed to make further appeal for complete records of this service. On motion, the faculty of the college were invited to participate in the exercises of alumni day, and to appoint a representative to deliver an address of welcome at the opening of the annual meeting. The corresponding secretary was authorized to have the usual notices printed announcing the annual meeting.

On motion of Dr. E. E. Hinman, the report was adopted and ordered entered upon the minutes.

The Treasurer, Dr. W. G. Lewi, presented his report for the year, as follows:

TREASURER'S REPORT.

Cr.

Received from Dr. T. F. C. Van Allen, May 2, 1900.....	\$236 79
Received from Board of Trustees of Odd Fellows' Temple, June 15, 1900.....	5 00
Dues received to May 1, 1901.....	10 00
Interest on money in bank to January 1, 1901.....	2 70
	<hr/>
	\$254 49

Dr.

Various bills paid, for which vouchers are presented.....	220 00
	<hr/>
Balance on hand May 1, 1901.....	\$34 49
	<hr/>

THE COLLEGE BUILDING FUND.

At last report this fund amounted to \$77.46. Interest to January 1, 1901, \$3.00, makes a total of \$80.17.

[Signed.]

WM. G. LEWI,
Treasurer.

On motion, the report of the Treasurer was referred to a committee consisting of Drs. C. H. Travell, G. Lenz and W. G. Conley, who examined the same, compared the disbursements with the accompanying vouchers, and subsequently reported it correct. On motion of Dr. H. F. C. Muller, the report of the committee was received and the committee discharged, and the report of the Treasurer accepted and ordered placed on file.

The President's address being the next order of business, the first President of the Association, Dr. H. D. Didama, was called to the chair, and President Crothers delivered the following address:

PRESIDENT CROTHERS' ADDRESS.

Fellow Alumni:

As the traveler, returning from a long journey in new lands, gathers his friends about him and discourses of the events and experiences by the way, in like spirit and manner I would talk with you, particularly of those things which are altering and changing all our former theories and beliefs. The interval of thirty-six years from the time of graduating from this college has brought with it not only great personal changes, but revolutions in both the science and art of medicine. There were wise teachers in the college in the sixties who gave thorough training in all

that was known of medicine at that time, and yet, to-day much of their science and teaching is obsolete. Surgery, obstetrics, practice and therapeutics have materially changed. The modern development of science has disillusionized us of many of the old theories and beliefs, and practical medicine to-day has revealed the necessity of new advances into higher fields.

It is this unlearning that is the real post-graduate school for the physician, and, like an astronomer, he must not only make new discoveries, but he must constantly correct old theories and eliminate all sources of error from past conclusions. The physician who pursues this course can justly be termed a scientist. No system of college training will fit a man to discriminate phenomena in medicine unless he possesses some power of seeing things for himself. Many who have very imperfect powers of original research may judge wisely of the facts collected by others, while on the contrary it is also true, that a man may possess a faculty of acute observation and yet lack the ability of synthesis, and so be unable to follow the natural sequence of cause and effect. Persons of either class can only grow in certain directions, and if they do their best according to their natural endowment, they should be exempt from all unjust criticism and censure.

Another fact should be remembered in our judgment of men, that many mature early in life and then cease to grow. Prize students and brilliant young men, who give promise of great attainments, not only disappear but disappoint us in their after life, while on the other hand, men who have attracted no attention as students develop the capacity of growth, which continues to the final close of life. The interesting fact is often noted, that brilliant young doctors become exhausted early, and fall into pessimistic conditions. Life becomes a funeral march, in which all the surroundings and conditions are wrong. There will be too many doctors and drugs, too many theories, the colleges will be wrong, and his professional associates will ever blunder. It will never occur to him that these shadows are only the projections of a starless night within himself. On the other hand, the optimistic physician, whose life is richer and broader for every day's experience, has no fears of overcrowding, or of errors, in the teaching or in the practice of his associates. Everything is a growth and development with him. Everything is wider and better, and he is constantly helping on the standard and raising the science and art of medicine. Such men are scientists everywhere, whether in the lonely country village or crowded city. They are steadily growing and developing. Every day is a school. Every case is a clinic, and every journal and book brings something to the vigor and strength of their lives. They may be unrecognized and unknown for years, but their day always comes at last, and they are found to have been the real workers who have revealed great truths and marked out paths of research unknown before.

It is a fact of great interest not well known, that nearly all the great discoveries in science have been indicated by obscure men who obtained no honor for their work, long before the facts were finally recognized.

In the domain of electricity, mechanics, philosophy, great discoveries have all been born out of old theories and ideas urged long ago.

In medicine, anæsthesia was described and used before Wells and Morton introduced it into practical science. Many of the facts of bacteriology, gynecology, neurology and therapeutics, which are hailed as modern discoveries, can be traced to the writings of obscure men in the past, who lived in an unreceptive age and beyond their day and generation, hence failed to secure notice of their work. Thus Jenner, Morton, Lister, Koch and others were able to arrange into a system the theories which the pioneers had seen and outlined many years before. In this way great injustice is frequently done to the vast army of silent, obscure workers who are constantly extending the boundaries of truth which were unknown to their contemporaries, and whose lives and labors have made modern medicine what it is. Year by year such men are steadily pointing out new facts or new applications of old theories that rise above the levels of the present. Often we persecute such persons, call them cranks and extremists and inferiors; the popular men in the profession look down upon them with pity as upon weaklings. These men do not labor in vain. While they may not be able to bring their facts into recognition, some one will come along and organize them into a system, and obtain the credit of the work, but the real, original workers will not always be forgotten. Already a general study of the literature of medicine will reveal outlines of great discoveries to come, which will not only revolutionize much of the theory and practice of the present, but will also bring into prominence the work of men that are unknown to-day. Thus the theories which are received with contempt and silence to-day will be welcomed to-morrow and heralded as great discoveries.

There comes to every professional man a period in which he would like to learn more along certain attractive lines of study. He has measured himself by the duties and requirements of general practice, and all his tastes and ambitions turn towards some field of work where he may obtain a wider knowledge and determine more exact facts of certain lines of study. This is the impulse which makes the specialist, and is the natural evolutionary movement in modern medicine, and a recognition of the demand which calls for more exact knowledge and higher standards of professional attainment. The same impulse is noticed in the explorer in unknown lands, who finds that he cannot traverse all the country, so he confines his work to some particular section. Thus Livingstone, Stanley, and many others concentrated their labors in certain sections, following rivers up to their sources or exploring certain lakes. In like manner the physician takes up a single path and follows it in the same scientific spirit; and with his increased vision and knowledge becomes more enthusiastic, and the larger range of more startling facts come into view. This is the province where the specialist must lead, and the great army of occupation will come on after; not always in his exact footsteps, but along the same general lines which he has marked out.

There are many physicians who complain of preventable evils in the

profession which not only increase the individual burdens, but also limit the efforts for scientific work. They assert that literature is mixed with selfishness, that commercial rivalry lowers the ethics of professional life, that physicians adopt the methods of quacks for the sake of patronage. They condemn professors and colleges, and advocate drastic legal measures to correct such wrongs. No one can say that such complaints are unfounded, but the remedies offered seem not to recognize the real causes of the evils. An old graduate of this college, now dead and gone, for years practiced what was one of the real remedies, namely, that no student be encouraged or allowed to attend lectures unless he showed some natural fitness for the profession. Every one of his students became eminent physicians in after life, through the wise discretion and counsel of this man.

The fault is back of the college, back of the professors, and is the same error seen in every department of life, of men working in positions they are unfitted for. Every student of medicine should have some early training and test to show his capacity for the practice of medicine. He should give evidence of the scientific enthusiasm of the explorer, combined with the conservatism of the judge, which would be a certain promise of success from the start. When this is done, the number of men who make a wreck of professional work will be diminished, and the young men who begin medicine with selfish, commercial ambitions of power and wealth, who disappear as scientific failures, will become fewer and fewer.

Every year the vast expenditure of time and legal measures to crush out the quack and charlatan and raise the standards of medical life ought to be reached by more simple measures. The practice of medicine ought never to be a stepping-stone to give dignity and character to the man, but he should bring to it character and reputation that would raise it to a position of honor and trust. We should insist that only the best type of men who show some natural aptitude for the profession be admitted; and in this way improve the quality and standard of physicians. It is only such men who can successfully meet and drive out the quack and charlatan. In every community second-class doctors with low commercial standards always encourage and help to breed quacks. They, like the squatters on the frontiers, will always move on and disappear when the genuine settler and scientific physician arrives.

The real physician is widely differentiated from the quack. He is not arrogant, nor pretentious, nor self-seeking. He does not drop to the level of personalities in the practice of his theories and opinions; and he is never a politician or a critic, but always a student and gentleman. The real scientific physician is always humble and awed by the small amount of knowledge he possesses compared with the unknown stretching ever about him; and every step forward is to him a new field with new facts, new possibilities, more wonderful than the last.

In every direction we are confronted with a very startling fact that there are wide, unexplored domains of causes of preventable disease unknown to-day. Our knowledge of bacteria, of chemico-physiological, dietetic, traumatic and psychological conditions which influence life and longevity

and provoke disease, is limited to a few first letters in the alphabet of this new literature. Even within the past year the old theories of the nature and causes of malaria have become revolutionized. A new physiology of the brain and its functions is opening up. New therapeutic applications of old remedies, with new physiological and psychological forces, with a new surgery, a new practice and new fields of prevention and cure of disease, are all in sight like great white harvest fields awaiting reapers. The claims of Christian science, osteopathy, and a host of other isms and paths, are but the empiric stages of truths covered up by delusional elements which a wider knowledge will unveil. This is recognized by the thinking men of the profession everywhere. Both the country and village doctor, as well as the city practitioner, readily discern these great facts in outline, and look out with longing for more exact knowledge and better training to understand the new conditions which call for higher skill and wider judgment.

It is this want and need of the times that has brought into prominence the post-graduate college. Within a few years over a dozen of these colleges have come into existence and are crowded with physician students. The rapid increase of books and journals is an expression of the same need and want. Thus, in operative surgery, the changes are so rapid and the advances are so radical that the general physician is startled at the evident necessity of keeping up, and of trying to understand something of these changes and new facts constantly appearing. Books and journals, while giving much exact knowledge, do not bring the assistance most needed.

Like the astronomer, the physician recognizes that he must compare his theories and conclusions with others for correction or confirmation, and he must know their methods and views to become better able to judge of his own work. It is this new phase in the progress of medicine that calls for new conditions and new methods of more advanced study.

I believe the time has come for a post-graduate college at Albany to meet this great want, and give advanced instruction to graduates and many hundreds of practitioners in this vicinity. Every graduating class that leaves this college carries out with it advanced medical knowledge of facts and theories and training in methods of diagnosis that make this need more apparent in the work of every professional man they come in contact with. A college for higher instruction would give the physician some idea of the newer methods and special lines of practical research, which would enable him to keep up with the recent graduate and supplement his practical knowledge with the more advanced teachings of the day. There is a great number of physicians who would welcome such teachings here at Albany, and who would gladly avail themselves of its privileges.

Such a college would have many advantages over the larger schools of central cities, because of the greater amount of personal work which could be done. The studies and researches would be direct and practical in proportion as it became personal. Graduates and others would bring their experience and methods of work for comparison, advice, and counsel,

and in this way new fields for larger and more practical work would be open. Such a school would be a medical tribunal for the settlement of perplexing questions that are so common and annoying. This college should be an expansion of the Medical College and a department of the University. It could be organized and carried on by the college for the alumni and others who would gladly join in most enthusiastic support and efforts to sustain it. Already the hospital and clinical material, with both buildings, laboratories and teachers, are at hand as a nucleus on which to establish a post-graduate school. Such a college, if established, would soon attract funds and be endowed for research work.

An organized effort on the part of the alumni and others would very early make this a permanent organization. This is thoroughly practical in view of the fact that some of the largest institutions in this country have come from the efforts of physicians who have influenced capital and turned impulses of charity into channels for their endowment and support. Johns Hopkins University grew out of the counsel of a family doctor. Clark University and Sheffield Scientific School, all were from the inspiration and advice of a trusted physician. There are many other examples of great colleges and charities organized and endowed by the influence and counsel of physicians. It would seem that the present is a most propitious time for the work, and the alumni of the Albany Medical College are sufficiently numerous and influential so as to be able to support and sustain this effort from the start. It is clearly evident that a college of this character will be established here at a very early day, and every graduate will rejoice in it and warmly welcome such a school for exhaustive study and personal research into the higher problems of medicine.

Gentlemen of the Class:

It is my pleasure, according to the usual custom, to offer a short exhortation of personal advice and counsel. Of course, you are to be congratulated and welcomed into the Alumni Association, and also into this ancient order of disciples of Esculapius, and this particular branch which has been dignified by the age and achievement of its members, and which has been increasing with the classes of every year.

Your fitness for membership will soon be legally attested by your possession of a diploma, and the order to "Fall in" will be given, and the march in the final campaign will begin. I can assure you that the journey before you is less arduous than that of those who took their places in the ranks long ago. Every new class of graduates starts higher up, with stronger and better preparation for the great work of life. Looking out into the future, you will find the horizon is always encircled with mists and fogs of ignorance and innumerable difficulties. The road you must pass over is not smooth nor level, nor is the journey a summer day's ramble, but one full of weary marches, over barren lands, through valleys and across mountains, where storms and cyclones come and go. Beyond this you will see glittering heights of success and triumphs awaiting all who have endured to the end. Farther on is the sunset glow of age,

which I hope many of you will reach, with its pleasing consciousness and satisfaction for having cleared away much of the ignorance and superstition, and made the world brighter and better. It is this view of life that gives new courage and endurance, a view that points to the celestial hills far away in the distance, but always in sight.

It is clear to those of us who are yet struggling on wearily, that the opportunities for new and original work in all departments of medicine were never greater than at present. New pathways are open, and new countries are appearing, and new facts of tremendous significance and practical value await the effort to become organized and applied in fields of practical science. At the beginning of your career, we look out upon this future and ask who of you will occupy these fields? Who of you will discover and put into service some of the great facts which are seen in outline now? Who of you will ascend beyond the levels of his contemporaries, beyond the great army of medical students who will graduate this year? Who of you will become pioneers and mark out new paths of progress and discovery? And, finally, who of you will enlarge the realm of science and of preventative medicine, and continue the march as students and explorers to the end? There are no obstacles that can prevent persistent energy and will from marching to the very heights of professional eminence, and while your dangers are as great as your opportunities, nothing but death can check or prevent this accomplishment.

As in all other great achievements, there are peculiar perils that menace your career, perils that seem more ominous than ever in these modern times. Thus, in the strain and excitement of our modern life, there comes the temptation to depend on drugs and spirits for temporary rest and relief. The new disease of spirit and drug psychosis is the concealed reef on which many able men of the profession have been wrecked. The narcotism of spirits only hides the danger signals and brings the victim nearer to destruction. Never cheat yourself with the delusion that you will be an exception to the rule, that you can trust these means for relief and escape.

Another dangerous reef of rocks is commercialism, making a trade of the profession, following it for the accumulation of money. If this is more congenial, abandon the profession and its practice, and enter upon trade openly. If your taste and ambition carry you into politics and society, give up the profession and avoid the pretension and hypocrisy which is inevitable from the conflicts of theory and practice. There was a time when the physician, who in manners and personal appearance defied conventionalities and hygienic laws, attracted attention to himself as an exception to the law. That time has passed. The successful doctor of to-day must in conventionalities be a gentleman in the best sense of that word. His habits and appearance must indicate his practical knowledge of the hygienic laws of health, and his culture will be judged by its application in his personal life and conversation.

No physician in any community should, under any circumstances, give occasion for any invidious comparison to be made between himself and other professional men. His professional life should approximate to an

ideal health of body and mind, and he should practice personally what he constantly teaches. No clergyman, lawyer, or other learned man should ever illustrate in his conduct and life a more thorough acquaintance with the applied facts and teachings of his profession than the physician. No physician should ever live a double life, and fail to practice the precepts and teachings which he gives to others. We are quick to condemn clergymen and others who live irregular lives marked by unprofessional conduct, and yet a physician more than any other educated man who fails to show his knowledge and training in his personal life and conduct is more reprehensible. There are practically no claims of professional duty which should destroy your health or force you into unhygienic states of life or living. You should abandon the profession if you cannot live clean, healthy, normal lives, and carry out what you preach to others in every-day thought and conduct.

Now, gentlemen, all that remains is the mustering-in process. You start equipped and in uniform, as the law directs, for the great campaign against suffering and death. By your efforts life is to be lengthened, disease diminished and prevented, and the slaves of ignorance and suffering are to be released. The enemies of the race are to be routed and driven back, and the boundaries of the known extended far out into the unknown. Like the soldiers of the famous Roman legions who never deserted nor turned back, you are to be ever moving onward through a long or short life, following orders from unseen commanders, and recognizing calls of duty and obligation above the clamor and roar of lower selfish impulses. Now in the early morning of the century you take your places in the ranks, and soon the distinct command, "Forward," will come, and the march will begin. Not only your teachers and the alumni of this college, but also your friends and near ones everywhere will watch your every movement and follow you with anxious regard. You will not be alone, and whether you reach the mountain heights or not, unseen eyes will note your progress and warm wishes and deep sympathies will go on with you always. The long roll is already beating, and the signal flags dipping, calling for the movement of the column, and with prayers and blessings, we wave you a parting farewell and God-speed for the great march to the battle-field that tests the value of every human life.

Gentlemen of the Alumni:

The story of the traveler's experience and observation with its moralizing and counsel is finished. The oft-repeated discourse has come to an end. The fire burns low in the grate and through the heavy, drowsy atmosphere is heard the monotonous roar from the street, deepening the somnolent impression and calling for rest and change. The traveler gathers up his wraps and hat and with husky farewells disappears from the scene. Days and months will come and go ere another traveler will appear on this same hearth-stone and discourse to another group of the alumni and another class of graduates. Thus the alumni procession will go on in an ever-widening and ascending march, and when the final reveille shall call us to another life, may the places which each one of

us has occupied be filled with stronger men. May the watch-fires of medicine kindled on this mount long ago be ever kept burning, breaking up the mists and darkness and extending far down into the future.

The members of the Class of 1901 were present in a body, and rose as the President addressed them at the conclusion of his address, and received them into membership in the Association.

Dr. W. B. Sabin moved a vote of thanks to the President for his interesting address, a copy of which he was requested to furnish for publication. Ex-President Didama put the motion to a vote, and declared it unanimously carried.

President Crothers then resumed the chair.

The Historian of the Association, Dr. Pearse, then presented his annual report.

REPORT OF THE HISTORIAN, DR. HARRY S. PEARSE.

Mr. President and Fellow Members of the Association:

Correspondence with various members of the Association during the past year has impressed me with the unforeseen and varied ways which Time employs in making her imprint upon life. In delving into the mists of the past, in search of records, I have seen that play of light and shadow which makes archaism so fascinating to us. Here we find vigor, prosperity and health; there debility, ill-fortune and the heavy hand of fate.

It is my pleasure to present to the records of the Association to-day a letter from one of the oldest living graduates, Dr. Jared Bassett, who, by virtue of being the first on the alphabetical list of his class, was the first to receive a diploma from the college. The letter reads like a romance and reveals to us a vigorous and beautiful mind reviewing a useful and varied life.

The half-century class, 1851, numbered twenty-three members, and but one is known to be living to-day, Dr. Gustavus W. Pope, of Washington, D. C., who is historian of his class, and who has submitted his report to us to-day. Time has also cast its shadow upon the class of 1861. Of the twenty-one members graduated but five are known to be living. Five members have died during the past decade, among them one of the most prominent members of the profession and a former president of this Association, Dr. Horace Tracy Hanks, of New York city.

It is our good fortune to have this year a report from the sixty-year class, 1841, which is submitted by Dr. R. F. Stevens, who had planned to present it in person to-day, but is unable to do so on account of illness. The report of '51 is by Dr. Gustavus W. Pope; of '61 by the historian of the Association; of '71 by Dr. Stephen A. Ingham; of '81 by Dr. Clarence A. Chaloner, and of '91 by Dr. William S. Ackert.

The two branches of the parent association are thriving. The Albany

Medical College Alumni Association of Greater New York held its sixth annual banquet and reunion at the Hotel Savoy, New York city, January 18, 1901, and the secretary of the New England branch of the Alumni Association of the Albany Medical College reports that two meetings have been held during the past year; that it is fairly well organized and that a general meeting will be held in Hartford, Conn., in June.

Letter to the Historian of the Association from Dr. Jared Bassett, of the class of 1839. Dated Evanston, Ill., April 17, 1901.

Dear Doctor Pearse:

After a silence of more than half a century, the Albany Medical College, through its legitimate off-spring, calls me up and I answer. I am asked to tell the story of myself. This is just what an old man likes to do. Well, the winter of 1839 I attended lectures at the Albany Medical College, and at the close of the term was examined for the degree of Doctor of Medicine and received a diploma, the first issued by the college. Now, sixty-two years later, the hand that received that first issue is writing this letter. I am enjoying health good for a man in his eighty-eighth year. Never as strong as some, and sometimes slightly ill, I have been wonderfully blessed in health, having been able every day of my life since I could walk alone to be on my feet, dressed and out of doors if I chose to go.

With a diploma, half a dozen standard medical books and a small pocket-case of instruments, I returned to the old home among the hills of the Green Mountain State—a little in debt. I offered my services to the sick; they were accepted. I gave them seven years of hard work—my best. The compensation was not large, but willing; the people were poor. I had saved a few hundred dollars, had married the girl I wanted and was ready to try a new field, where winters were shorter and the soil more generous. We had heard of the great new West; we liked the story. September 1, 1846, we turned our faces in the direction of the setting sun and traveled diligently night and day, by all the approved methods of travel known in those days: by stage-coach, canal packet, a little by railroad and much by steamboat. On the morning of September 10, after a stormy and sleepless night on Lake Michigan, we sailed into the Chicago river. It didn't look like home, but we had come to stay and no talking back. We found board in a private family. I went about studying the young city. I found they claimed a population of 14,000. It was a motley gathering, from nearly all parts of the Old World and the New, nearly all young, full of energy and hope. They had come to better their condition. There were no old families proud of "blue blood," nor any families of much wealth.

I bought a small home in a pleasant neighborhood centrally located, and put out a modest indication of my calling. I soon had patients and put in the next ten years of steady night and day work for the sick. In the meantime business had encroached upon the neighborhood, making the home unpleasant. I gave up the home to trade, went out a mile further and secured another home, with an acre of ground for a garden. I con-

cluded I was entitled to more rest and to sleep o' nights. I gave up general practice, attending a few families several years longer.

My profession gave me twenty years of quite satisfactory employment. I have had for forty years retirement from practice. These years have not all been passed in idleness. Some small investments made early in Chicago have grown, requiring much care and work. I have given my time mainly to my business interests, to the neglect of medical studies; consequently I am medically badly faded.

My wife, my advisor and helper for nearly sixty years, passed away last August. Of four children born to us only one is left, a son, who now has the care of my business affairs.

I miss my early friends; their loss casts a shadow over my days. Otherwise my evening of age in many ways is blest: my home is pleasant, surrounded by pleasant people. I have health, my hearing is good, vision a little impaired. I ride a few miles daily, walk when I feel like it, read, visit and sleep—so the days pass. I have a faint recollection of students Strickland and Snyder. The Professors March, Armsby, Emmons and others, who taught the class of 1839 the art of healing the human body, are now studying beauties and glories beyond the mystic river. My memories of them are pleasant. I thank you for thus calling me up.

Yours very respectfully,

JARED BASSETT.

REPORT OF HISTORIAN OF CLASS OF 1841

To the Members of the Alumni Association of the Albany Medical College—Greeting:

Your historian has requested me to report for the class of 1841.

In doing so I must needs look backward over more than sixty years to find Dr. Israel I. Buckbee, of Fonda, N. Y., and myself alone survive. The graduating class of that year numbered thirty-one.

The professorship rated high and at its head was a noted surgeon and accomplished gentleman, Dr. Alden March, who was respected and beloved by all. The college was then a young institution, but already ranked older ones in the ability of its faculty, the number of students and facilities for the best of medical education.

In looking back the two survivors feel that time is unduly carrying off their years—that they are older than they ought to be, but fain would hope that the closing years of life may prove the crowning glory of their existence—

Like the Sun—in going down

Brightly tints the golden west.

So,—Years that wear the silver crown

May rightly seem to be the best.

I am able to report of only two of the graduating class of 1841: Dr. Israel I. Buckbee, of Fonda, N. Y., and myself, Dr. Richard F. Stevens, for many years a resident of Syracuse, now of Lysander, N. Y.

Dr. Buckbee was born in Dutchess county in 1821, spent youthful life

on farms and received a common school education, until he began to read medicine in '39 and '40 at Castleton, Vt., and at Albany, N. Y., and graduated in 1841. He has since resided in Fonda, enjoyed a lucrative practice and a golden wedding, and has good health at the present time.

Of myself I have to say that I attended the last two courses of lectures at the old Fairfield Medical College in Herkimer county, of this State. Of the graduated of that justly renowned institution there are but few survivors, and prominent among them may be mentioned Dr. Charles Sumner, of Bolton, Conn.—a conspicuous type of the old school physician and country gentleman. I received my diploma at the hand of Dr. Alden March and commenced practice at St. Louis, Mo., in the hospital of that city, continuing there five years, in which time I served as demonstrator of anatomy in the St. Louis Medical College and established the *Missouri Medical and Surgical Journal*. In the first few years of my practice I became somewhat noted for the number of successful operations for strabismus. Returned to New York State in 1848 and continued in a moderate practice until seventy-five years of age, since which I have continued in touch with the profession and its progress until now at eighty-three years I find myself acting as my class historian, thankful for long continued health, but with approaching infirmities. In the year 1878 I had the honor of acting as president of this representative body of our *alma mater*.

In the faculty of the college were the stern visaged Scotchman, Professor MacNaughton; the erudite Professor Hun; the accomplished Dr. Armsby; the Brothers Beck; Dr. Willis, and the unsurpassed surgeon of his day, Dr. Alden March. They were profound in their respective departments, and I take pride in paying tribute to their worth. In my practice of sixty years ago I found venesection nearly abandoned, anæsthetics not in use by the profession and appendicitis nearly unknown. If any of the present class look forward sixty years, the changes in the medical world will furnish evidence of progress, and whatever else may betide, the survivors of 1841 extend their fervent wish for the continued prosperity of their old *alma mater*.

[Signed.]

R. F. STEVENS, M. D.,
Historian, Class of 1841.

REPORT OF HISTORIAN OF CLASS OF 1851

Mr. President and Fellow Members of the Association:

The class which, half a century ago, left the fostering care of our *alma mater* numbered twenty-three members, and it is one of the strange vagaries of fate that to-day the only member left to tell the tale is the historian of the class, the one delegated to chronicle the lives of the others, and it grieves me sadly to know that there is but one life to record—my own.

Of the twenty-three members, twelve have sunk from the sight and knowledge of their old classmate, leaving no trace of their goings or

comings; eleven are known to have died. Two served in the Civil War and one, Dr. Francis L. R. Chapin, acted as president of this Association in 1881.

Of myself I have to say that, I was born in 1828, in Rome, Oneida county, N. Y. My father was Dr. G. W. Pope, Sr., an eminent physician of that place for fifty years. I studied medicine under him, graduated from the Albany Medical College in 1851, took a post-graduate course the next year at the medical department, New York University, and was appointed assistant physician to the New York State Lunatic Asylum in Utica in 1853. In 1856 I married and moved to Washington, D. C., and was the family physician to many members of the cabinet, also of the foreign legations from various European and South American countries, also of many senators and members all through the successive administrations from President Buchanan to Harrison. I also attended many officer's families and soldiers all through the Civil War, was the family physician to Secretaries Stanton, Dana and Watson, Senators Harris and Conklin, of New York, President Garfield and Secretary Blaine, and attended Colonel Rathbone, who was wounded by the assassin Booth when President Lincoln was shot by him. For the last five years I have been compelled to retire from practice in consequence of ill health. Col. Benjamin Frank Pope, my youngest brother, is also a graduate of the Albany Medical College at a later date. He was surgeon of one of the New York regiments all through the Civil War, at many military posts during the various administrations, surgeon of General Shafter's army in Cuba, and lately appointed chief of the entire medical and surgical department of the Philippine Islands. Our great-grandfather was captain of a Vermont company in the Revolution, was a schoolmate of Gen. Ethan Allen, was with him at the taking of Crown Point and Ticonderoga, was with Gen. Benedict Arnold at the forlorn attack on Quebec and with Generals St. Clair and Gates through nearly all the battles of the Revolution.

The interests of my dear old *alma mater* will always have a warm place in my heart, and I fervently wish for the continued prosperity of my foster mother.

GUSTAVUS W. POPE, M. D.,

Historian, Class of 1851.

REPORT OF CLASS OF 1861

Mr. President and Fellow Members of the Association:

It falls to the Historian of the Association to make the report of this class, the two class historians successively appointed having died within the past decade, Dr. Thomas Becket, of Albany, and Dr. Horace Tracy Hanks, of New York city. Dr. Becket, who was known by many here present, died in 1896. Dr. Hanks was one of the most noted members of the profession at the time of his death in November, 1900. He was deeply interested in the Alumni Association, and acted as its president in 1885. A few days before his death I received a letter from him consenting to act as historian of his class, though he scarcely felt able to

accept the responsibility. Of the twenty-one who graduated, sixteen served in the Civil War, one dying in service; eleven members are known to have died; five are known to be living, three of whom have responded to requests for their life records. The letters are appended. Of the remaining five there are no existing records.

Dr. Charles B. Fry, of Mattoon, Ill., writes: "My life has been too uneventful to make it of interest to any stranger. I was commissioned assistant surgeon 21st New York Infantry, August 12, 1862, and served with that regiment as acting surgeon until mustered out of the service sometime in June, 1863. I am unable to give these dates accurately. I was then commissioned assistant surgeon 122d New York Infantry, July 30, 1863, but owing to the fact that the regiment had only a minimum number of men in the field, I could not be mustered in at that time and accepted an appointment from the surgeon general, U. S. A., as acting assistant surgeon, and was detailed for duty at Balfour General Hospital, Portsmouth, Va., then under the charge of Surgeon Edward B. Dalton. I remained in the service until February 24, 1864, when I was detailed as surgeon in charge of the United States flag of truce steamer New York, engaged in the exchange of prisoners. I remained in that service until I resigned my commission in July, 1865. I was commissioned first assistant surgeon First New York Engineers, November 22, 1864, and mustered into the service with that rank. I was in business for four years in Williamsburg, Va., from 1865 to 1869, and for a brief time in St. Louis, in 1870 and 1871. I then came to Mattoon and have been in continuous practice of my profession here ever since. I am now division surgeon of the C. C. C. and St. L., and district surgeon of the Illinois Central railways, assistant surgeon general of the Illinois National Guard and mayor of this city."

Dr. W. L. Hollister, of Austin, Minn., writes: "I feel it is a long time since I graduated from the Albany Medical College in the class of 1861. In 1862 I settled on the banks of the Hudson at Stuyvesant, Columbia county; the next year I went to Kingston and assisted in the examinations of substitutes drafted and enlisted for the army, and spent my time there until the spring of 1867, when I left for Austin, Minn., and have resided here ever since, practicing my profession most of the time. I am now sixty-four years old and I think I am as robust and hearty as most of the men of my age. I am not doing much or working very hard, but am trying to enjoy the rest of my time as best I can. I often think of my college days and think I will visit the old college some time during the meeting of the Association. How it will be, time will only decide. But remember me to the members of the Association. I always think of them at their gatherings and wish I were there. Give them my warmest wishes for the future and may Heaven bless you all is my prayer."

Dr. C. A. Catlin, of Redwood, N. Y., writes: "Immediately after I graduated in 1861, I returned to Redwood and commenced the practice of medicine and found it rather up course, and getting the war fever pretty strong, applied for commission in 2d New York Cavalry, went down to

the front, the regiment doing duty on the dismal swamp canal in North Carolina. I did not accept the position, resigned and came home and practiced when I could get it. The war fever had not subsided, and I applied again for another position and by return mail got an appointment in 1st New York Cavalry with Sheridan in the Shenandoah; remained in service until discharged by order of war department after the surrender of Lee at Appomatox Court House. I returned home, resumed practice again and soon bought half interest in drug store and let my partner look after the store and I attended to my practice. I was soon appointed postmaster and held the position for twenty years, until Cleveland was elected first time, then I stepped down and out and continued my old business for four years, and then got an appointment as examining surgeon for pensions for Jefferson county; held that for four years, then had to step down and out again. Since that time I have practiced some, but looked after the store mostly, for I had to discontinue night practice on account of poor health, and am still at the old stand doing what I am able. Soon after I returned from military service I married Martha J. Wicks, of Antwerp, Jefferson county, N. Y., and have been blessed with four children, three girls and one son. My married life has been very pleasant, I have been fairly prosperous in business and with due economy will be able to keep the wolf from the door."

HARRY S. PEARSE,

Historian, A. A., A. M. C.

REPORT OF HISTORIAN OF CLASS OF 1871

Mr. President and Fellow Members of the Association:

It is my pleasure to report fair success in gathering the records of my classmates. Of the thirty-three (33) members who graduated, ten are known to have passed away; two have been entirely lost track of; twelve responded to my requests for records and their letters are appended; and nine whose addresses are known failed to respond.

The reports received are as follows:

DR. GEORGE CONKLING, *Durham, N. Y.*: After I left Albany in '71 I went to Northville, Fulton county, where I remained until about January, '72, when I removed to Durham, Greene county, where I still reside. I have no family except my wife, and have no fault to find in the way Dame Fortune has dealt with me. I can say that I have been fairly successful in every respect. This is a boarding section, and in the summer the mountains are full of boarders. I keep six good horses and rigs to match, and would be glad to see you or any of the boys of '71 at any time.

DR. H. L. COOKINGHAM, *Red Hook, N. Y.*: After graduating in 1871 I located temporarily at Staatsburgh, N. Y., where I remained till August, 1873, when I came to this town, which has been my home up to the present. In 1876 I married Miss Mary J. Hicks. We have been blessed with two girls and two boys, all living and healthy. Have had a good practice since my first year here. Have been honored by my fellow-

citizens in many ways. Have been coroner six years; postmaster under Harrison and Cleveland five years; president of the village corporation three terms; was specially honored by my church one year ago by being elected delegate to the general convention of the M. E. church which met in Chicago and which gave me a vacation of a month—the longest I have ever had. Professional engagements have always prevented me from attending the alumni meetings in the past, but I am now going to let up a little and hope to attend the next. My best wishes always to my *alma mater*.

DR. E. JAY FISK, *Troy, N. Y.*: After I left my class December 26, 1871, I returned to Troy and continued as assistant physician at the Marshall Infirmary until May 10, 1874. I resigned my connection with the Infirmary to accept the position of city physician; held this position for four years and resigned the office to accept a position on the *New York Medical Journal*. In this new field I tried to do the work of two men, not willing to let go my practice in Troy. I gave four days each week to my patients and three days to my journalistic work in New York. At the end of fifteen months my eyes gave out and I was compelled to quit work for one year. In a then debilitated condition, attendance at a prolonged and severe confinement case brought on an attack of acute myelitis, from which I have but partially recovered. After fifteen months I resumed practice, office work in chief. My condition has kept me from meeting with my former class friends or attending the annual meetings and joining in the greetings and festivities. I am in hopes of drawing together sufficient courage to make an effort to meet with the class this year. I may fail. It will be a pleasure to meet any members of my *alma mater* at my home in Troy, and if the day is favorable give them a spin up the avenue at a 2:20 clip.

DR. J. F. FORCE, *Minneapolis, Minn.*: After graduating in the class of 1871 I practiced my profession for a few months in Stillwater, N. Y. Thinking a change from the village of my boyhood days desirable, I moved to Minnesota and settled on Heron lake, in the south-western part of the State, where I remained a busy practitioner until 1885, and then came to Minneapolis, which has since been my home. In 1888 I dropped as rapidly as possible a profitable and busy practice to give my attention to other matters in which I had been gradually becoming interested. For many years I have been a member of the board of directors of the Metropolitan bank, and closely connected with several other financial institutions. I have been closely identified with life insurance and the president and manager for many years of a company from whose management I have just retired. I am largely interested in copper mining. Belong to the G. A. R. and Loyal Legion; hold membership in the various Masonic bodies, Blue Lodge, Chapter and Commandery. My wife says I am a "Joiner." I keep up my membership in the State Medical Society and am vice-president of Asbury Hospital. As to church relations, I have been appointed delegate to the Ecumenical Methodist Conference to be held in London, September, 1901, and expect to attend. I am also a member of the board of education of this city. A kind

Providence has granted me continuous good health, a desire to work and plenty of opportunity. The wife of my youth is still with me; four children came to us, three are with us still and one is not; she passed to the beyond at four years of age. I have not met a classmate for many, many years. I hope to find a full report of all survivors of the class of 1871 in the report of May 1st.

DR. J. H. GALLUP, *Delmar, N. Y.*: Twenty years ago I located at Gravesend, N. Y., and while there enjoyed a good practice and successfully treated all my cases of smallpox and yellow fever. Unfortunately for myself, having been a veteran of the Civil War, not being strong and in the interest of my health came to Delmar, N. Y., in 1881. While here I have not gained all the world, but am comfortably situated. Am at present not doing general practice as I am nearing sixty-eight years of age, but am successfully treating cancers without the knife, without pain, without the loss of blood; and, if incurable can prolong life indefinitely. My best wishes to the class of '71.

DR. JOHN VANR. HOFF, *War Department, Washington, D. C.*: After graduating from the College of Physicians and Surgeons at New York in 1874 I went before the Army Medical Board and was commissioned a lieutenant, assistant surgeon, in November of that year. My first service was in the Territory of Wyoming and surrounding states and territories, where I remained until 1879, when I was ordered to Fort Monroe and served there for two years. Thereafter I went to California, having in the meantime been promoted to the grade of captain. After serving four years in California, during which time I acted as professor of ophthalmology and laryngology in the medical department of the University of California, I spent a year in Europe at different medical centers, particularly in Vienna, where I was a matriculant of the university. Returning to the United States in 1887, I served at various stations on the frontier and in civilization, being in 1891 promoted major. At the outbreak of the Spanish-American war I was appointed lieutenant-colonel, chief surgeon, U. S. Vols., and assigned to the 3d Corps. In the autumn of 1898 I went to Porto Rico as chief surgeon, where I remained for two years, being greatly occupied, in addition to my official duties in connection with the military government, in charge of sanitary and charitable work. During this period I organized and carried to successful conclusion the vaccination of the million inhabitants of the island, thereby absolutely eliminating smallpox. I had charge of the relief work which followed the destruction wrought by the hurricane of August 8, 1899, which necessitated the feeding on an average of a hundred thousand people daily for a year. While in Porto Rico I was ordered to China as chief surgeon of the China Relief Expedition, and shortly after the capture of Peking and the distribution of the American forces, I was ordered back to the United States and assigned to duty in the office of the surgeon general of the army, where I am now.

Of course, you will understand that I might fill in this skeleton with many exceedingly interesting details of experiences by flood and field, in

war and peace, but I fancy this will be sufficient for my part of the record of the class of 1871.

DR. STEPHEN A. INGHAM, *Little Falls, N. Y.*: Since graduation, after serving one year in the Albany City Hospital, I have been in active practice at Little Falls. I was married September 5, 1899.

DR. J. J. MILLER, *Cobleskill, N. Y.*: After graduation I practiced medicine for a time in Charleston, N. Y., obtaining a large practice and very little pay. I had much experience, however. After leaving this fruitful country I engaged for twelve years in passing through the various states of our great commonwealth, giving popular lectures on anatomy, physiology and hygiene and therapeutics. After leaving the lecture field I located and practiced medicine in the city of Amsterdam for eight years, and from there came to Cobleskill, N. Y., where I am at present located and enjoying a fairly lucrative business. I often think of the class of '71, noble-hearted boys, full of fun and good cheer, and generous to a fault. May I meet them all beyond the Great Divide, where there are no open graves and none are sick. Of the teachers and professors who were with us when we graduated, quite a number have laid down the armor and have gone from labor to reward. A few remain. I loved them all. They were always kind and indulgent and ever ready to help when we got into close quarters in the quiz and other places. They were all noble and true men and have done a great work. I send love and kindly greetings to all.

DR. JOHN C. STRADER, *Lafayette, N. J.*: I located in New Jersey next day after graduation and have never left it. Never done anything else but follow my profession. The last few years my health has been impaired, but I am better now and hope to get well again. Have met with good success but not riches. Married, but no children. The youngest member of my class—just twenty-one and that was all—I am now fifty-one only. My hair is white as snow and I look to be sixty-five at least. I regret your new laws do not recognize my diploma as of any value. We have retaliated by a law of the same kind; yet, after all these years such work to me is all trash. The true M. D. is in the head and heart, and not on the chart.

DR. R. THOMSON, *Troy, N. Y.*: Having received my diploma and finding myself in rather poor health, I went west to Illinois to rest and recuperate. In the following spring I made a trip of exploration in Kansas. After a few weeks' stay I accepted the position of assistant to Dr. Hubbard, of Lansingburgh, N. Y., and there got some clinical experience and practical advice. The doctor in Johnsonville, thirteen miles distant, dying nine months after this, I took his practice and had two years of rather pleasant and successful country practice. In March, 1875, I left Johnsonville and came to Troy, N. Y., where I married and have lived ever since, engaging in general practice, and if I am not rich, still I have managed to pay my debts and tried to do right by the people who have employed me.

DR. J. K. THORNE, *Gloversville, N. Y.*: After leaving my *alma mater* in 1871 I located at Broadalbin, N. Y., was there until October, 1884.

Married the second year after I began practice. I moved to Gloversville where I am still located. I was coroner of Fulton county nine years. Have been health officer of the city of Gloversville two years, and previous to that time was one of the city physicians for two years. My practice is mostly office work. I have two sons, one twenty-seven and the other twenty-four.

DR. G. L. ULLMAN, *Albany, N. Y.*: A few months after graduation I went to Europe and entered the University of Wurzburg, in Bavaria, remaining two years. On my return I commenced practice in the ward where I have always lived and voted, and have always resided in the same block in that ward. The ward is number 13, and I have never worn a beard—so much for superstition. In 1875 was elected treasurer of the Alumni Association and held the office for eleven years; was for several years a member of the executive committee. In 1876 held the office of district physician for a short time. In 1878 was appointed by Governor Robinson assistant surgeon of the 25th Regiment with the rank and commission of captain. Served till the regiment disbanded. While in this service met my wife, whom I married in 1883, and we are now the proud possessors of a grown-up daughter. In 1891 went to Polyclinic in New York and freshened up a bit on medical subjects. In 1894 was elected coroner's physician and served four terms. In 1899 was elected vice-president of the Albany County Medical Society, in which society I had already served four terms as treasurer. I have always been kept busy and my success in life is wholly my own. Long hours and hard work and the loss of hundreds of hours of sleep have made me bald-headed and gray, and I am four times a grand-daddy in practice—that is, having attended the mother in accouchement and in later years the daughters. I am still with you, having missed only one meeting of the Association since its organization. I am always in a hurry and expect to die in a hurry. From a remunerative standpoint, my bank-book indicates fair to middling, but not having quite reached the five-hundred thousand dollar mark.

STEPHEN A. INGHAM,

Historian, Class of 1871.

REPORT OF HISTORIAN OF CLASS OF 1881

Mr. President and Fellow Members of the Association:

When, in the memorable year of 1881, sixty fine young fellows received the degree of M. D. from this honored institution, there were a lot of people that knew it was the best class ever graduated from our *alma mater*, and we thought a lot more were going to find it out. Alas! The unappreciative mind! A few of them did. They married us, that is, most of us.

We went out to conquer the world; and win, if not renown, at least respect and prosperity. After twenty years of hard fighting, some of us have won the respect of posterity and are hustling to retain it, while we let the world "wag as it will." Others, loaded with honors of a more public sort, still cry, "Excelsior," and press on.

It is the province of your historian to secure such items of general interest concerning the individual members of the class as he may, and report the same to you as accurately and succinctly as he can. The work has been done amid the pressing demands of a country practice, and has required a great deal of correspondence, including the writing of a number of letters not yet answered.

Of the sixty members of the class, eleven have laid down their work and passed to the Great Beyond; fourteen more have failed to respond. From the information gleaned we are able to present the following accounts:

ABRAMS, ALVA E.: After graduation, entered into partnership with Dr. S. G. De Lamater, of Duanesburg. This continued until 1883. In March of that year he became associated with Dr. J. A. Stone, of Hartford, Conn. This co-partnership continued pleasantly and profitably until early in 1886, when a large field for practice opened at Collinsville, Conn., and was occupied by him only a short time before the death of his former partner in Hartford left an opening which Dr. Abrams has filled with much satisfaction ever since. Is a member of the Hartford Medical Society, the Hartford County Medical Society, Connecticut Medical Society, The American Medical Association, and the American Health Association. Also visiting physician to the Hartford Orphan Asylum. Is one of the deacons of the Park Congregational church of Hartford. Has a wife and three daughters.

ALLEN, WILLIAM L.: Continues to practice medicine at Rensselaer, N. Y. Is prospering in material things, but expresses greater joy in the true riches "which neither moth nor rust corrupt." Has a wife and two sons.

ARCHAMBAULT, L. J. S.: Began the practice of medicine at Alps and Sand Lake, N. Y. In '84 removed to Troy, and later to New York, where he continues to practice.

BEEBE, FRANK: Informs the historian that he has been located at Johnstown, N. Y., since graduation; is well, and by a little temporary assistance from the commissioner of charities, enabled to exist.

BLAIR, LOUIS E.: Still continues the practice of medicine at 204 State street, Albany.

BLAKE, GEO. A.: Practiced his profession in Watertown, N. Y., for fifteen years, when he was obliged, on account of failing health, to give up and move onto a farm at Great Bend. Has since resumed practice, especially of surgery, being engaged to look after a large force of men employed by the St. Regis Paper Co. in establishing an immense plant near him. Has had two hundred cases of minor surgery in four months.

CALDWELL, NATHAN D.: Located in Pulaski N. Y., in 1882. After practicing here a short time removed to Hagaman, N. Y., in 1883, where he has practiced the profession ever since. He has taken a lively interest in local politics, and is now serving a second term as president of the village, the incorporation of which was recently accomplished, largely through his efforts. Is a member of the Amsterdam City Medical Association. He has a wife and one daughter.

CHALONER, CLARENCE A.: Settled in Stephentown, N. Y., soon after graduation, and has continued to practice his profession in the one place till the present time.

CLASSEN, FREDERICK L.: Continues to practice in his native city of Albany. Fairly prosperous and happy, with a wife and a son of fifteen years of age.

CULVER, CHARLES M.: Is also practicing in Albany. Prosperous, and a member of half a dozen medical societies. Is first vice-president of The American Academy of Medicine.

DURYEE, CHARLES C.: After spending six months in Englishtown, N. J., returned to his own home city of Schenectady, where he is well established and enjoying a lucrative practice. Was mayor of the city from the fall of '97 till January 1, 1900. Has been twice married and has three children.

EVEREST, NELSON: Located at Rockwood, N. Y., after leaving college. Remained there in active country practice until December, 1897, when he removed to Gloversville, where he is enjoying plenty of work and expects to remain.

FOOTE, FRANK B.: Opened an office at Altmar, N. Y., in 1881. Remained three years, fairly successful. Removed to Baldwinsville, N. Y. Since 1891 has resided and practiced his profession in Parish, N. Y. Has three children.

FORTUNE, WILLIAM E.: Opened an office in Nicholville, N. Y., his birth place, and says the ups and downs of a country practice have been his.

FRAZIER, LEONARD: Located in Amsterdam in June, 1881. Remains in the same place, practicing Homœopathy. Has a family.

FURBECK, HENRY L.: Spent a little over a year after graduation with Dr. Wheeler at Farmer, N. Y., then located in Little Falls, N. J. Remained there until 1888, engaged in the drug business and in the practice of medicine. October, 1888, returned to this State, and finally located at St. Johnsville, where he claims to be a fixture, practicing his profession with success and satisfaction. Is a member of the Montgomery County Medical Society, also of the State society. Has never married.

HAMMOND, JOHN A.: Is located at Schuylerville, N. Y., but makes no report.

LAWRENCE, EDWARD S.: Has been practicing medicine since graduation at Ballston, N. Y. Married February 5, 1885, to Jennie F. McClelin. She died January 24, 1901. Has no family.

LOCKWOOD, JOHN F.: Reports from 1036 Sheridan Road, Chicago, where he is engaged in active practice of the profession, and enjoying health of mind, body and spirit. The latter he regards as first in importance, and rejoices in the full salvation of Christ Jesus. Is a member of the Chicago Medical Society.

MASON, WILLIAM P.: Is professor of chemistry in Rensselaer Polytechnic Institute, Troy, N. Y. Member of American Philosophical Society, American Chemical Society, American Waterworks Association, Franklin Institute, etc., also of the Sanitary Institute of Great Britain, and the American

Public Health Association. His specialty is examination of municipal water supplies. Was appointed by President Cleveland on the U. S. Assay Commission in 1896. Studied bacteriology at the Pasteur Institute, Paris, France. Author of books on examination of water and water supply.

MATTICE, M. B.: Took Greeley's advice and began the practice of medicine in Elkton, S. D. Worked into a lucrative practice from the first. Married in 1883. Has two boys and two girls. Removed to Sedro-Woolley, Washington, in 1891. Has a large practice here, mostly surgery. Is superintendent of hospital and surgeon to railroad and mining companies. In '96-'97 took a two months' course in the Bender Laboratory. Is only three hours' ride from Seattle, and invites the boys of '81 to call.

MILLER, HOWARD: Practiced in Albany until 1890. Removed to Ravenna, where he is still practicing.

MITCHELL, JAMES H.: Is practicing his profession, enjoying good health and leading a "strenuous life" at Cohoes. Takes a lively interest in municipal affairs, and is serving his third term as mayor.

MORRIS, S. HALL: Known as the "old man" of the class, began the study of medicine in 1849, at the age of thirteen, completing a three years' course, which included a course of lectures at Ann Arbor, in 1851-2. He engaged in teaching and other business for several years. In October, 1880, entered the senior class of Albany Medical College, graduating in 1881. Located in New York city and two years later at Oneonta. In 1890 he began the practice of medicine in Rochester, N. Y. Since that year the historian has no report of him. He was twice married and had two daughters.

MURRAY, DANIEL D.: The next fall after graduating, opened an office at Rouse's Point. In 1884 succumbed to an attack of "western fever" and migrated to Mayville, N. D., where he had a large and lucrative practice. In 1890 removed to Duluth, Minn., where he still remains, practicing the profession and finding enough to do. Has had several municipal offices. Has a wife, two daughters and one son.

NELLIS, THEODORE W.: After graduating, went into business of a surgical and physicians' supply depot; and making the treatment of hernia a specialty. Has been successful in both lines.

PAINE, HOWARD S.: Began the practice of medicine and surgery in Albany immediately after graduating. At one time had full charge of the surgical department of the Albany Homœopathic Hospital. In 1894 removed to Glens Falls, where he is at present located. During the last few years of residence in Albany he gave special attention to the treatment of the eye, ear and throat, and now devotes time exclusively to the eye. Nearly every year since 1882 has conducted parties of tourists through Europe, thus securing a vacation during July and August, and a delightful change. Has attended clinics in Paris, and the Moorfields Ophthalmic Hospital and the Royal Ophthalmic Hospital in London. Is a member of the Glens Falls Medical and Surgical Society. Married November 26, 1890, to Sarah M. Potter, of Glens Falls.

RULISON, ELEAZER E.: Located in Amsterdam one month after graduating, and has practiced medicine and surgery in the same city until the present time. For thirteen years has been surgeon for the West Shore railroad, and this year for the New York Central also. For the past six years coroner of Montgomery county.

SCHLEY, FAYETTE E.: Has an office for the practice of his profession at 473 West End avenue, New York city. He first began at Pine Hill, N. Y., and remained seven years, then removed to Denver, Col. Has had two trips to Europe, and spent one winter in Florida as resident physician at one of the large hotels. The rest of the time has been in New York. Is married and has one daughter.

SPALDING, WARREN C.: Practiced in Schodack, N. Y., until 1884. Went west for a time; then located in the city of New York, where he is still engaged in general practice. Finds the work congenial.

SPENCER, GEO. F. A.: Located in Barre, Mass., in 1881. Remained nine years. Blessed with a wife and three daughters and general prosperity. In 1890 removed to Ware, Mass., a larger place, where he is enjoying a profitable practice. Has served as State Medical Examiner and Medical Examiner for several life insurance companies. Is Mason and Odd Fellow.

STEPHENS, EDWARD J.: Has been in active practice in Utica since graduating. Is married. Two children, son and daughter. Member of several medical societies and several fraternal organizations. Is attending physician to the Masonic Home.

TERWILLIGER, RUFUS W.: Resides in Gloversville. Not now engaged in practice of medicine, but hoping soon to take again the work of his chosen profession.

WEBSTER, WILLIAM B.: Located in Schuylerville, N. Y., in 1881. Still practicing in the same place. Married in 1883 to Miss Ella McCreedy, of Schuylerville. Has two daughters. Has served several terms as health officer, been elected coroner twice and president of the village twice. By a dint of trying to behave has kept out of jail. Well and happy and wants to live to be a hundred. '81 boys happening that way are invited to call.

VAN RENSSELAER, HENRY R.: Settled in Lanesboro, Mass., and soon worked up a fine practice. Was thoroughly devoted to his work and profession. In the winter of '95-'96 he served a term in the State Legislature, removing his family to Boston for the winter, and hoping by the change to improve his health, which was impaired by too close application to his profession. Returning to Lanesboro he resumed his practice. He began to break down in the fall of '97, and since that time has been nervously prostrated, and has been under special treatment for the last two years. His recovery has been thought doubtful, but at last accounts he was somewhat improved. His stay in Lanesboro covered seventeen years and he proved himself a successful physician. His absence is mourned by a large number of friends. He has acquired some property. Has a wife, and a son of sixteen, and a daughter of seven years, respectively. Is himself forty-five years of age.

Of some of those who have gone to the land whence they send no greeting, we can speak somewhat fully; of others we can only say, They are gone, as, soon or late, we too must go. God grant we may be ready when the summons comes.

DAVID FLEISCHMAN: Was born in Albany, educated in the Albany high school and at Yale College, where he received the degree of B. A.; studied medicine with Drs. J. M. Biglow, A. Vander Veer and J. P. Boyd and graduated from Albany Medical College in 1881. Practiced medicine in Albany. Died January 30, 1892.

D. E. HIGGINS: Practiced medicine in Putnam, N. Y., for nearly ten years after graduation. He then removed to Whitehall, N. Y., where he practiced until his death, which occurred about a year later.

FRANK POTTER JOHNSON: Valedictorian of the class, was born in Schenectady, N. Y. Graduated A. B. from Union College in 1875. His short life ended April 1, 1882. In January of that year he contracted diphtheria, which was followed by jaundice. He never regained his strength and in March developed typhoid fever. He was twenty-nine years of age.

HENRY N. JOHNSON: Was born in Coeymans, N. Y. Graduated from Rutgers College, 1876, degree of A. B. Began the study of medicine with F. G. Mosher, M. D., of Coeymans. After graduating from Albany Medical College he returned to his native town and there practiced medicine and carried on the drug business until the time of his death. He died of pneumonia, the result of overwork, July 12, 1897. He was ill only about one week. He never married. He was a whole-souled, true-hearted man; an earnest pathologist and a successful practitioner.

EDWARD C. KENNEDY: Settled in Brooklyn, N. Y. Died October 30, 1889.

FREDRICK DANA MORRILL: Was born at Wakefield, Mass. Attended the grammar schools of Boston and Albany. Was for many years clerk in a drug store. In 1878 he began the study of medicine with his brother. After graduation he practiced in Albany and held several public medical offices. He died from an attack of pneumonia January 1, 1897.

MARSHALL E. NELLIS: Was born in Port Jackson, N. Y. Began the study of medicine in April, 1878. Spent three years at Albany Medical College. Died April 12, 1882.

JEREMIAH O'CONNOR: Spent all of his professional life as a resident physician at the Troy Hospital. Was police surgeon for some time, and had some practice outside the hospital. The cause of his death was a general debility, complicated by lung trouble. Date of his death not learned.

FRANK G. SEAMAN: Was born at Fairfield, N. Y. Educated at Fairfield Seminary, graduating in 1876. Began the study of medicine in 1877 with Dr. J. N. Willard of his native town. He spent three years at Albany Medical College. After graduation, settled at Seneca Falls, N. Y. He died July 13, 1898.

EVERT P. VAN EPPS: Began the study of medicine in 1878 with Dr. A. M. Vedder in Schenectady. Spent two years at Albany Medical Col-

lege. One month after graduation he opened an office in his native city, where he continued to practice until the time of his death, January 7, 1899. May 3, 1881, he was appointed city physician, and was reappointed the following year. He was a member of Schenectady County Medical Society and was at different times secretary, vice-president and president of the same. His death resulted from pneumonia after an illness of only three days.

LANSING T. VEDDER: Was born at Niskayuna, N. Y. Educated at Fort Edward Institute and at Union College. Began to study medicine March 1, 1878. Spent two years at Albany Medical College. After graduating he located first in Rochester; removed to Schenectady in 1883, and was married the same year. Went abroad in 1888. Died May 12, 1900.

Of the remaining members of the class we are able to give the addresses of eight, but have no further information concerning them. They are:

WARREN C. COOPER, 81 Third street, Troy, N. Y.

EDWARD L. CRANDALL, 1 Eighth street, Troy, N. Y.

THOS. HAYS, Holland Patent, N. Y.

LAWRENCE E. KINNEY, Sixth street, Waterford, N. Y.

GEO. A. KRUG, 60 Second street, Utica, N. Y.

WM. T. MILLER, Cobleskill, N. Y.

JOHN W. MORRIS, Troy, N. Y.

GEO. H. VAN WAGNER, Wappinger's Falls, N. Y.

This leaves only six entirely unaccounted for, viz: ELVIN D. BRADLEY, IRA HARRIS, NELSON W. KELSO, LAUREN F. ROSE, CHAS H. CRAWFORD and WM. J. MURPHY.

CLARENCE A. CHALONER,

Historian, Class of 1881.

REPORT OF HISTORIAN OF CLASS OF 1891

Mr. President and Classmates of '91:

It affords me great pleasure to greet you in this capacity, and to present a brief chronicle of each member of our class so far as I have been able to obtain it. Each one speaks with a cheerful and contented spirit and seems very well satisfied with the manner "Dame Fortune" has treated him. Yet a vein of sorrow courses through our meeting, when we think of those who are not with us to-day. He who was elected our historian and could have filled the position better than I, on account of ill-health, has not been in active practice for some time, but we hope he will again be able to resume the work in our chosen calling and be able to take his place among our number. There are others whose voices are stilled, whose work is done, and sadly I chronicle their demise.

F. E. DUELIEN died on September 13, 1895, at his home in Corning, N. Y.

EDWARD A. HOFFMAN died December 1, 1896.

WILLIAM J. KERNAN died November 24, 1897, at his home in Albany.

A letter directed to WARNER A. MILES was answered by his widow, who said he died at Hempstead, L. I., on September 1, 1898, having prac-

ticed successfully at that place for two years. The chief cause of his death was appendicitis.

ABRAM B. SIMMONS died at Cohoes, N. Y., September 12, 1893.

I have heard directly from twenty-six members of the class.

WM. S. ACKERT, *258 Mill street, Poughkeepsie, N. Y.*: On April 1, 1891, the day of graduation, I entered the Albany City Hospital and remained there till the last of September, 1892, when I went to my old home at Rhinebeck, N. Y., for a few weeks. In October, 1891, I decided to locate at Rensselaer, N. Y. On November 30, 1892, I was married to Miss Margaret Parker, of Albany, N. Y. We spent a few days with A. C. Cobb, of '92, at Southampton, Mass., and a short time with friends at Rhinebeck, N. Y., and on December 15, 1892 we returned to East Albany and commenced preparations for housekeeping. I immediately secured a fair practice, which gradually increased until I enjoyed a very good patronage. In November, 1900, we heard of a vacancy in Poughkeepsie, N. Y., and on investigating we decided to remove to that city, which we did on December 6, 1900. The field is more promising and the prospects are encouraging for the future. Our first baby was born November 26, 1893, but she lived only a few hours. A second, Ruth S., was born October 26, 1896, and is now the joy of our home. I look back with warm feelings of regard to our old *alma mater* and the professors and instructors, who so ably discharged the duties of their respective stations, and I think some steps should be taken by the alumni to aid in securing a new and commodious college building which will be in accord with the surroundings and needs of the times.

J. M. BOWMAN, *Wallkill, N. Y.*: In the spring of 1891 I opened an office at Olive, N. Y., my native town, and remained there till October of the same year, when I moved to Rifton Glen, N. Y. On December 1, 1891, I was married to Miss Hannah Houghtaling, of Kingston, N. Y. I remained at Rifton until February, '94, when I moved to Eddyville, near Kingston, N. Y. In February, 1899, I moved to Wallkill, where I have a large and growing practice, amounting to about \$3,000 per year. Wallkill is a very pleasant village, having a population of about 500 or 600 inhabitants, situated on the line of the Wallkill Valley railroad. I have a very pleasant and genial class of people to deal with; am perfectly satisfied in my present location and am content to remain here a number of years, if not the remainder of my life. My family now consists of my wife, myself and one child, a boy of nearly four years of age.

NEWTON W. BROWN, *Cedarville, Herkimer county, N. Y.*: I located here, where my father, Dr. Wm. H. Brown, had practiced medicine for twenty-six years, after my graduation April 1, 1891. I entered into partnership with my father, which continued up to the time of his death, August 14, 1895, since which time I have conducted the business alone. I married in the fall of 1896 and have two children. I am located in a place of not over 200 inhabitants and have an extensive country practice, which necessitates my keeping three good horses. I have been more successful than I anticipated, and while my work has been arduous, I

have never for a moment regretted the three years that I spent in the Albany Medical College.

WALTER H. CONLEY, *Buffalo State Hospital*: After I was graduated I assisted Dr. Perry in his practice for the summer of '91, and October 1, 1891, went to the Albany Hospital and remained there until February 1, 1893. Then I went to New York in the out-door department to Roosevelt Hospital and remained there until July 1, 1893, when I returned to Albany and assisted Drs. Vander Veer and MacDonald until December 5, 1894, at which time I was appointed assistant physician at the Buffalo State Hospital, where I have since remained and am at the present time.

CHARLES E. DAVIS, *140 State street, Albany, N. Y.*: In answer to your request for an historical sketch, I would venture to say that letters and historical notes of one's self, edited in the personal pronoun, are, as a rule, of interest only to those who write them. But to leave your communication unanswered would be a discourtesy to you, being one which I fully appreciate, for the reason that your humble servant acted as historian of the Alumni Association for some years and knows what it is to anticipate a large number of replies and to receive but few. We always believed that all men were more or less diffident about writing their own biographies. April, 1891, found me with a piece of parchment in my hands, containing many signatures of great men at the bottom, the power conferred by which I did not know best how to bestow. Realizing that something ought to be accomplished after so many years of devoted listening to lectures on "*Impure Water*" and "*Indeed Gentlemen,*" of the awful effects of syphilis on the human family, I located at 91½ Hudson avenue, in the city of Albany, N. Y., because I believed I was needed in this county and also because the walking at that time of year in the country was not good. After more ups than downs (especially at night), with some afflictions that excessive zeal in one's work always causes, I succeeded in establishing a paying practice. During the first years of practice I was instructor in physiology, hygiene and medical jurisprudence in the Albany Medical College. After some service in the local military organization I was made surgeon of the 10th Battalion, N. G., N. Y., in 1897 and one of the health commissioners of the city of Albany. In 1893 I was appointed U. S. pension surgeon and served until a patriotic administration removed me while away in the U. S. Volunteers. In 1898 the war with Spain found me prosperous and located at 223 State street, in Albany. I was appointed major and surgeon of the First N. Y. Volunteer Infantry and mustered into the United States service on May 6, 1898. After a service lasting until March, 1899, I was mustered out and returned to Albany. During the Spanish-American war our regiment saw service in Forts Hamilton, Wadsworth and Governor's Island; after which we were ordered to join the expeditionary forces going to the Philippines, and were afterward ordered to the Hawaiian Islands as a garrison and to take part in the annexation of those islands. At Honolulu I was detached from the regiment and ordered to take charge of and establish a United States Military hospital. Before being relieved the *one* hospital had increased to three and one field hospital and from thirty beds to about

400 beds, with nine assistant surgeons and 165 nurses and attendants. In April, 1899, I was married in New York, and after six weeks at Baltimore, where I took post-graduate work in Johns Hopkins, I went abroad and with sight-seeing found time to walk the hospitals of Europe, besides taking a three months' post-graduate course in Vienna in surgery and gynecology. In January, 1900, after returning to Albany I located at 140 State street, where I have since practiced the specialty of diseases of women. After the first of May my office will be at 15 Washington avenue. Before leaving home, in 1898, I was instrumental, with others, in organizing the South End dispensary, which has grown and is now one of the best in the city. Since my return to business I have been appointed attending surgeon to the Child's Hospital and St. Peter's Hospital dispensary.

F. E. DEAN, *South Shaftsbury, Vt.*: After leaving the A. M. C. in 1891 I went through the Hoosac Tunnel and located on the banks of the Deerfield river, in the town of Charlemont, Mass. I made my home there one year, when I left to go farther up the river to the flourishing town of Readsboro, Vt., to take up the practice of a doctor who was going away. I rode over the hills of the Green mountains for three years more. Then, owing to the hard winters and rough roads, I became unable to live in such a severe climate on account of my health. I left Readsboro, Vt., in the spring of 1895 and came to the town of Shaftsbury, Vt., where I have been six years the first of April. My health has been excellent up to this past year, when I bought a piece of land, staked out for the foundation of a beautiful house, which was completed this winter and which we are now enjoying. I am married and have three children.

JOSEPH W. DROOGAN, *Westchester, N. Y.*: I made a voyage as ship's surgeon immediately after graduation and then settled in Albany and engaged in practice until 1895. During that time I was for two years secretary of the County Medical Society, and for a like period a coroner's physician. In January, 1895, I removed to the annexed district of New York city and have resided here since. Have had active practice from the beginning and in addition have been the attending physician to several large institutions, among others the New York Catholic Protectory, with its 2,000 inmates. Am married and have two children. Look back with satisfaction and gratitude to the old *alma mater*. Find that in the competition for practice and "plunks" the equipment provided has held its own with that afforded by the more pretentious medical institutions.

N. D. GARNSEY, *Kinderhook, N. Y.*: I started the practice of medicine in Kinderhook, N. Y., May, 1891, and have continued until the present time. I enjoy my village and country practice and expect to continue indefinitely at the same old stand. I was married in 1895 and have no children.

HENRY W. JOHNSON, *Hudson, N. Y.*: Dr. Johnson located in Hudson in 1891 after having taken a physician's practice in Albany for a season and he has built up a fine practice, which at this season of the year keeps him over busy. He is a member of the County, State and National Med-

ical associations, a member of the city board of health and assistant surgeon of the National Guard. He has a wife and one little son, a year and a half old, who is even now very much interested in the medicine case and office attractions.

EDWARD JOSLIN, *Whitehall, N. Y.*: Immediately after graduation I entered St. Peter's Hospital, remaining there one year. The following summer was spent in rest and recreation. In October, 1892, I located in this town, where I have since remained. Practice has been fair since the beginning and I have no particular grievance to air.

J. W. JOSLIN, *217 W. Main street, Johnstown, N. Y.*: I located here in 1891. Was well received and have a fine practice. As to my family I have a wife and one boy. I am a member of the Medical Society of the county of Fulton; was health officer of the city of Johnstown for the first three years of its existence; have held the position of county physician for two years; was elected coroner of Fulton county in 1894 and have been coroner ever since, and still have three years more to serve.

JAS. E. KELLEY, *106 W. 101st street, New York city*: I first located in my old home in Pittsfield, Mass., where I remained for three years. In September, '92, I married a charming young lady from that place. My health failing, I was advised the sea-shore. I practiced in New London, Conn., from 1894 to 1898, when I moved to Yonkers, N. Y. I came to New York a little over a year ago and am very well pleased to have done so, as in my opinion this is the location, the city "par excellence;" here is a field, large enough to satisfy the most ambitious. This narrative of numerous changes may be suggestive of the old adage, that a "rolling stone gathers no moss;" however, I have nothing to complain of. I have done and am doing well, while the prospects for the future are bright. I have no family, having lost two daughters.

WM. N. KNOWLTON, *768 Huntington avenue, Boston, Mass.*: I first located in a small town in New York, where I did a fairly good and successful practice. In 1893 I moved to a small city in Vermont, but, owing to a very severe injury, I was compelled to be away from the town for a whole year. My practice, of course, suffered a severe loss, and in 1897 I entered the employ of the Malt Diastase company and have since that time been "traveling." I have but recently associated myself with Dr. "Freddie" Williams, of the class of '91, as you will remember. I will enter his office in this city June 1, when I hope to share his very successful business. I am married and have two children.

SHERWOOD LE FEVRE, *Central Bridge, N. Y.*: Have no history at all except that I am still in single blessedness, getting three square, a little to wear and a place to sleep. Will endeavor to make a little history on May 1.

LOUIS LE BRUN, *71 South Ferry street, Albany, N. Y.*: I am still doing business at 71 South Ferry street, this city, and have no complaint to make as everything is running along smoothly, and as I am not married have no other cares on my hands but the widows and orphans of my district, and they don't worry me very much as I am gaining flesh rapidly.

R. B. LAMB, *Dannemora State Hospital*: All my work since graduation

has been done in the State Hospital service. I commenced at the old asylum in Auburn some six months after taking my degree in medicine. When the Matteawan State Hospital was opened in 1892, I became a member of the medical staff and remained attached to it till June last, when I was made superintendent of this hospital. My promotions were made in 1893, 1894 and in 1896 I became the senior assistant at Matteawan, a position that I held until my final transfer here. The winter of 1895 I spent with Dr. Clouston in Edinburgh, and enjoyed the rare advantage of his personal teaching. My interests now seem well confined to mental work, though I still retain my interest in the general work of the profession and try to keep in close touch with it.

L. R. OATMAN, *6 Church street, Greenwich, Washington County, N. Y.*: The autumn following my graduation I became interne of the Ward's Island Hospital for one year. After finishing my term of service there I located in Gloversville, N. Y., December 15, 1892. While there I was city physician four years, county physician one year and three years was one of the attending surgeons to the Nathan Littauer Hospital of Gloversville, the last year being president of the staff. The spring of 1900 I sold my place there and moved to Greenwich, Washington county, N. Y., it being near my old home. I now have a very gratifying practice here. In September, 1893, I was married to Miss Agnes E. Morris, of Greenwich, N. Y. We have one child, a girl, five years old.

GEORGE H. REYNOLDS, *Delhi, N. Y.*: Shortly after graduating in May, 1891, I settled in the little hamlet of Trout Creek, Delaware County, N. Y. About two years later, in the spring of 1893, I came to Delhi, the county seat of Delaware county, and have remained here since. In October, 1895, was married to Miss Minnie L. Stoddart, of Delhi; the result of this union to date is one son, Dumond Stoddart, born June, 1899. I have purchased a residence here and am living as independently and happy as the average mortal. Try to mind my own business and let other people attend to theirs. Have never been arrested or had suits at law, though I have frequently been in county jail—jail physician. Have the honor of being the treasurer of the Delaware County Medical Society and president and secretary of the fire company. As recreation, spend some time with poultry and gardening, having secured a number of first prizes at county fair on garden vegetables.

W. O. SCOTT, *Parish, N. Y.*: After graduation I at once located at Parish, Oswego county, N. Y., where I have been ever since. Am a member of the Oswego County Medical Society; am single, and, after numerous proposals with a corresponding number of rejections, I consider the prognosis rather unfavorable. However, I think I have been fairly successful in other directions and have no reason to despair. I shall make a desperate effort to be in Albany May 1.

WARD BEECHER SALTSMAN, *332 Purdy street, Buffalo, N. Y.*: After graduation I located in Fort Plain, my native town. April 13, 1893, we landed in Buffalo, located at 332 Purdy street and have been hanging out at the old stand ever since. Fortunately I secured a good

location here and am very happy to say that I have been quite successful, doing well, with practice increasing all the time. I have two children.

H. A. STALEY, 797 *State street, Schenectady, N. Y.*: I am married and am still looking forward to a family, who are very tardy in arriving. I am well located, happy and prosperous, expecting to remain where I am. As there has been nothing of special interest to record since the good old college days except the general routine work that we all experience, I will say nothing further on that subject.

EVERT E. TRACY, 100 *State street, Chicago, Ill.*: I located in the city of Chicago in August, 1891. During my first few years of practice my work was all general. However, by gradual evolution, I drifted into surgery and gynecology, which I am now following almost entirely. So far I have not been able to become a millionaire, but believe that I am doing as well as the average poor struggling doctor. I was married April 21, 1896, to Miss Mabel M. Sahler, daughter of Judge Sahler, of Omaha, Neb. We have no family.

H. W. VAN ALLEN, 197 *State street, Springfield, Mass.*: I presume I am not remembered by the majority of the class of '91, as my final examinations were passed with the men of '90, but my diploma was withheld one year as I was not of legal age. Since leaving college I have been in Springfield. The first year and a half I was house officer at the City Hospital and since that time have been in private practice. No specialty. In 1896 Miss Emma Geisel, of this city, became my wife and we have a son one year now. Last summer was spent in Europe, in pleasure and study.

A. B. VAN LOON, 50 *Eagle street, Albany, N. Y.*: After graduation I sojourned in New York city for about two years. During that time I graduated from the New York Homœopathic Medical College in the class of 1892, took special courses in Carnegie Laboratory and the Twenty-third Street Throat and Nose Dispensary, and from 1892 to 1893 served on the staff of the Ward's Island Hospital, New York city, as interne. I located in Albany in May, 1893, and have since practiced here. Was married in April, '95, to Miss Caroline S. Phillips.

G. J. VAN VECHTEN, *Oneonta, N. Y.*: On May 14, 1891, I located at East Meredith, N. Y., and remained there about three years. I found it rather a hard country to practice my profession and removed to North Adams, Mass. Remained there about two years, then removed to Oneonta, N. Y., where I am well pleased and have since been in active practice here. Have served a term as coroner of this county and am at the present time a member of the pension board of examining surgeons, located at Oneonta, N. Y. My professional career has been attended with the usual ups and down, but, taken as a whole, think it averages up pretty well.

F. A. WILLIAMS, 541 *Boylston street, Boston, Mass.*: After leaving college I spent a few months in New York city, at the Polyclinic and different hospitals; then went to Florida and engaged in the practice of medicine and real estate matters. I returned to Albany, served a short term at the Albany City Hospital, then opened an office at 425 Clinton

avenue. I took the examination and was appointed on the staff of the Hudson River State Hospital, Poughkeepsie, N. Y. I resigned the position in November, 1895, and came to Boston, Mass., taking up special work on the eye. The following summer I was married to Miss E. A. Paine, of Minneapolis, Minn. A little over a year later I opened a sanitarium at West Newton, Mass., which venture was discontinued after three years. At present I am living at No. 8 Regent circle, Brookline, Mass., with office at 541 Boylston street, Boston.

J. W. WILTSE writes from 6 South Hawk street, Albany, N. Y.: After graduating I went to my home in the Catskills for a three weeks' rest; then came back to Albany and rented an office at 1181 Broadway about May 15, 1891. I had at this time a debt of about \$600. Fortunately I began to get work from the first day, and although it was not always of the most lucrative kind, still I managed to get along and pay expenses. In the spring of 1892 I was appointed a district physician at \$400 *per annum*. I then prospered so well I began to tire of boarding-houses, and sewing on my own buttons, and on October 19, 1892, I married Miss Lizzie M. Bailie, of this city, and about this time changed my house and office to 1203 Broadway, where we began keeping house. In the spring of 1896 I took a three years' lease of 135 North Pearl street, Dr. S. B. Ward's house and office. I remained there till my lease expired and then removed to 6 South Hawk street, my present location. I united with the Albany County Medical Society soon after locating and have been twice elected a member of the board of censors, once secretary and finally vice-president. I hold the appointment of visiting physician to the South End dispensary, dispensary physician to the department of skin and genito-urinary diseases, St. Peter's Hospital, and instructor in materia medica in the Albany Medical College. I regret to say that I shall be unable to meet with my old classmates on May 1, as I sail on April 24 for Vienna to pursue a course in skin and genito-urinary diseases, which department of medicine I hope to practice as a specialty when I return. I have two children, a boy and a girl.

The following members have not responded to my inquiries sent to the addresses given to me by the Alumni Historian, Dr. Pearce, or to their last place of residence as known to me:

In the fall of 1892 I called on JOHN H. COBB, in Binghamton, N. Y. He was doing well and was in partnership with his father.

WM. J. FLEMING located in the lower part of Troy and was there less than a year ago.

Letters sent to JOSEPH FRIEDMAN, at 162 E. 74th street, New York city, have been returned unclaimed.

EDWARD L. JOHNSON has not replied from Central Bridge, Schoharie county. He located in Gloversville after graduation and later went south and afterwards returned to Schoharie county, but I cannot give his present location.

SHERMAN S. KATHAN located in Johnstown, N. Y., after graduation and later practiced somewhere in the middle west. He has lately been in Ballston Spa, N. Y., but I have not heard from him directly.

JOHN C. O'HAIRE practiced for a time in Watervliet and Troy; later removing to West Sand Lake, N. Y., and about a year ago he took up his abode in Nassau, N. Y.

WM. J. PENNINGTON is at 85 S. Ninth street, Brooklyn, N. Y.

MICHAEL F. PHELAN, Troy, N. Y., failed to make any report.

FRANK K. ROURKE did not reply from 304 Madison avenue, New York city, nor were my communications returned to me.

JAMES H. TIMMERS is said to be in Buffalo and engaged in some secular work, but ultimately expects to resume practice.

GEORGE A. WILLIAMS left Albany for *parts unknown* some three or more years ago.

WM. S. ACKERT,
Historian, Class of '91.

The Recording Secretary stated that biographical notices of deceased members of the Association had been published in the ALBANY MEDICAL ANNALS during the year, and requested members of the Association to forward biographical sketches of deceased alumni. He then read the following:

NECROLOGY.

Dr. John E. Losee ('52), at Upper Red Hook, N. Y., December, 22, 1900, aet. 74.

Dr. Heman Chaffee (54), at Tolono, Ill., May 22, 1900, aet. 83.

Dr. Robert V. K. Montfort ('56), at Newburgh, N. Y., December 18, 1900, aet. 65.

Dr. William Henry Stuart ('61), at Norwich, N. Y., April 12, 1900, aet. 50.

Dr. Horace Tracy Hanks ('61), at New York city, November 19, 1900, aet. 62.

Dr. Wyllis F. Wood ('74), at Rensselaer, N. Y., April 11, 1901, aet. 49.

Dr. William H. Edsall ('77), at Highland Falls, N. Y., February 9, 1901, aet. 49.

Dr. Lansing T. Vedder ('81), at Schenectady, N. Y., May 12, 1900, aet. 40.

Dr. Peter F. Gurley ('83), at Newport, R. I., December 13, 1900, aet. 39.

Dr. William J. Woodruff ('94), at Providence, R. I., July 29, 1900, aet. 30.

Dr. Arthur T. Robinson ('95), at Mansfield, Mass., November 3, 1900, aet. 34.

Dr. Isaac B. Schauber ('99), at Green Island, N. Y., April 10, 1900, aet. —.

The committee appointed to nominate officers presented the following report, which was read by its Chairman, Dr. W. G. Tucker:

For President,

DR. CLARKSON C. SCHUYLER ('75), Plattsburgh, N. Y.

For Vice-Presidents,

DR. ISRAEL I. BUCKBEE ('41), Fonda, N. Y.

DR. WILLIAM FREDERIC HOLCOMBE ('49), New York City.

DR. DANIEL H. COOK ('73), Albany, N. Y.

DR. NELSON EVEREST ('81), Gloversville, N. Y.

DR. ROBERT B. LAMB ('91), Dannemora, N. Y.

For Recording Secretary,

DR. J. MONTGOMERY MOSHER ('89), Albany, N. Y.

For Corresponding Secretary,

DR. ANDREW MACFARLANE ('87), Albany, N. Y.

For Treasurer,

DR. ROBERT BABCOCK ('84), Albany, N. Y.

For Historian,

DR. HARRY S. PEARSE ('92), Albany, N. Y.

For Members of the Executive Committee (term three years),

DR. JOHN F. REILLY ('83), Rensselaer, N. Y.

DR. LEO H. NEUMAN ('92), Albany, N. Y.

DR. HENRY L. K. SHAW ('96), Albany, N. Y.

DR. EUGENE E. HINMAN ('99), Albany, N. Y.

On motion of Earl D. Fuller, the report was accepted and adopted, and the Recording Secretary was instructed to cast a ballot in behalf of the Association for the gentlemen named therein. The ballot was cast, and those named in the report were declared by the President duly elected officers of the Association for their respective terms.

Dr. S. B. Ward, Chairman of the Committee on Award of the Schuyler Alumni Prize, presented the following report:

ALBANY, N. Y., April 30, 1901.

To DR. T. D. CROTHERS,

President Alumni Association, Albany Medical College.

Dear Mr. President: At the last annual meeting of this Association Dr. C. C. Schuyler, of Plattsburgh, a graduate of the Albany Medical College in the class of '75, offered a prize of one hundred dollars for the best essay written by a graduate of this college on some prescribed subject.

The subject assigned for this year was: "The influence of the discovery of the relation of bacteria to disease on the practice of medicine, exclusive of surgery." The undersigned were appointed a committee to award the prize.

Four essays were in due time submitted in competition, each signed by

a motto and accompanied by a sealed envelope bearing the same motto and enclosing the name of the writer.

Your committee have examined the essays with great care and are unanimously of the opinion that the prize should be awarded to the writer of the essay bearing the motto "*Bacterium Unsuspectum*."

We feel also that honorable mention should be made of the one signed "*Laboratory Worker*."

All of which is respectfully submitted.

SAMUEL B. WARD,
A. VANDER VEER,
HENRY HUN.

Dr. Ward then opened the envelope entitled "*Bacterium Unsuspectum*," which enclosed the name of Dr. H. Judson Lipes.

On motion of Dr. Tucker, which was carried, the successful prize essay was placed in the hands of the Executive Committee, and the Committee of Award was continued.

The Corresponding Secretary, Dr. A. MacFarlane, presented a letter and portrait from Dr. Charles A. Ingraham of the Class of 1878.

Dr. Schuyler, President-elect, was introduced to the Association and thanked the members present for the honor conferred upon him, and assured them of his desire to do all in his power to promote the prosperity of the Association.

Extemporaneous addresses were also made by Drs. I. I. Buckbee, H. D. Didama and W. F. Holcombe.

The Recording Secretary read the following notice:

A meeting of the Association of Resident Physicians of the Albany Hospital will be held in the Chemical Lecture Room, immediately after adjournment of this meeting. All ex-house physicians are requested to attend.

C. B. HERRICK, *President*.

The Recording Secretary announced the order of exercises for the afternoon and evening, and, no other business appearing, the meeting, on motion of Dr. Tucker, adjourned.

COMMENCEMENT EXERCISES.

The sixty-seventh commencement exercises of the Albany Medical College were held at Odd Fellows' Hall, on Wednesday afternoon, May 1, 1901, at three o'clock, in the presence of a large audience. Rev. Dr. A. V. V. Raymond, President of Union

University, presided, and upon the stage were seated the members of the Faculty, officers of the Alumni Association and prominent citizens.

The following was the

ORDER OF EXERCISES.

- Overture*—"Banditenstreiche"*von Suppe*
- Prayer*—REV. WILLIAM FORCE WHITAKER, D. D.
- Music*—SELECTION: "Florodora"*Stuart*
- Essay*—CLAYTON KENDALL HASKELL, 2d
- Music*—'CELLO SOLO: "Scherzo".....*von Geon*
- MR. ARNOLD R. JANSER

CONFERRING DEGREES

BY ANDREW VAN VRANKEN RAYMOND, D. D., LL. D.,
President of Union University

- Music*—INTERMEZZO: "Salome"*Lorraine*
- Address to the Graduating Class*—REV. WALLACE BUTTRICK, D. D.
- Music*—CHARACTERISTIC PIECE: "Mosquito Parade"*Whitney*
- Valedictory*—ARTHUR JOSEPH BEDELL
- Music*—VALSE: "Bleue"*Margis*

REPORT ON PRIZES AND APPOINTMENTS
DR. S. B. WARD

- Music*—MARCH: "San Toy"*Jones*

The Graduating Class was as follows:

- Charles James Baum.....Albany, N. Y.
- Arthur Joseph Bedell.....Watervliet, N. Y.
- George Samuel Burns.....Warsaw, N. Y.
- John Wilson Burns.....Albany Rural Cemetery, N. Y.
- Robert Beatty CastreeWestfield, Mass.
- Joseph Ambrose Cox.....Albany, N. Y.
- Thomas Edward Deveny.....Watervliet, N. Y.
- John Henry Dingman.....Stockport, N. Y.
- Edward Gerald Griffin.....Rensselaer, N. Y.
- John Michael Griffin.....Albany, N. Y.
- Edward Joseph Hannan.....Watervliet, N. Y.
- Clayton Kendall Haskell, 2d.....Albany, N. Y.
- John Francis Heffernan.....Albany, N. Y.
- Arthur Fenwick Holding.....Albany, N. Y.
- Thomas Francis Judge.....Troy, N. Y.
- James Everett Kelley.....Dean's Corners, N. Y.
- Joseph Waldron MooreCohoes, N. Y.
- John Bertman Neary.....Watervliet, N. Y.

Daniel Duane Parrish.....	Salem, N. Y.
Nishan Alexander Pashayan.....	Albany, N. Y.
William Brink Rosecrans.....	Nassau, N. Y.
Clarence Leander Sicard.....	Amsterdam, N. Y.
George Alpheus Smith	Lansingburgh, N. Y.
Michael Joseph Thornton, A. B.....	Albany, N. Y.
Jacob Wachsman.....	Brooklyn, N. Y.
Max Wachsman.....	Brooklyn, N. Y.
Leland Orlo White.....	Fort Plain, N. Y.
Charles Lansing Witbeck.....	Cohoes, N. Y.

Dr. Ward presented the prizes. He read a report on the Vander Poel prize, endowed by Mrs. Gertrude W. Vander Poel, in memory of her husband, the late S. Oakley Vander Poel, M. D., for many years a professor in the college, stating that this prize, consisting of a clinical microscope and accessories, offered to the senior student passing the best bedside examination in general medicine, had been awarded to Dr. Arthur F. Holding, and that at the competitive examination for house physicians and surgeons at the Albany Hospital the following appointments had been made: Drs. John M. Griffin, Michael J. Thornton, E. Gerald Griffin and Arthur F. Holding.

The prize offered by Drs. Vander Veer and MacDonald for the best report of the surgical clinics was awarded to Dr. Arthur F. Holding.

The prize consisting of an ophthalmoscope, offered by Dr. Merrill for the best report of the eye and ear clinics, was awarded to Dr. Charles J. Baum.

The Townsend Physiological prize endowed by the late Professor Franklin Townsend, Jr., M. D., was awarded to Mr. H. E. Hoyt, for passing the best examination in physiology at the end of the first year of study. Honorable mention was made of Mr. Albert Vander Veer, Jr.

Dr. Boyd's prize to the student passing the best final examination in obstetrics was awarded to Dr. John M. Griffin.

The prize consisting of a case of surgical instruments, offered to the senior student passing the best final examination, by Dr. T. W. Nellis, was awarded to Dr. Michael J. Thornton. Honorable mention was made of Drs. J. Wachsman and N. A. Pashayan.

The prize offered by Dr. H. R. Powell to the second year student passing the best final examination, consisting of a general operating case, was awarded to Mr. J. Howard Branan.

A prize consisting of Gross' complete pocket case of instruments, offered by A. B. Husted & Co. to the first-year student passing the best final examination, was awarded to Mr. H. E. Hoyt.

Dr. Bigelow's prize for the best dry preparation of the nose and nasopharynx was awarded to Dr. Arthur F. Holding, Jr.

Dr. Blumer's prize, consisting of a microscope and accessories, to the second-year student presenting the best record for laboratory work in pathological anatomy, was awarded to Mr. J. H. Branan.

The Daggett prizes, consisting of eighty and forty dollars, respectively, for the best "anatomical specimens," were both awarded to Dr. Arthur F. Holding.

The Daggett prize for the best "deportment irrespective of scholarship," consisting of eighty dollars, was awarded to Dr. N. A. Pashayan, and the second prize, consisting of forty dollars, was awarded to Dr. George S. Burns.

THE ALUMNI DINNER.

The twenty-eighth annual dinner of the Alumni Association was held at the "Ten Eyck," on Wednesday evening, May 1, 1901, at half past eight o'clock. About one hundred and fifty were present, including members of the Association, the guests and members of the Graduating Class.

After the tables had been cleared and cigars passed, the following toasts were responded to, Dr. Arthur G. Root acting as toastmaster :

1. "The State of New York," His Excellency, Governor Odell.
2. "Our Ex-Presidents," Dr. Thomas D. Crothers.
3. "Union University," President A. V. V. Raymond, LL. D.
4. "The Law Department of Union University," Hon. D. Cady Herrick.
5. "The Press," G. Edward Graham, Esq.
6. "The Clergy," Rev. Wallace Butrick, D. D.
7. "The Board of Trustees," Hon. Simon W. Rosendale.
8. "The First President of the Association," Dr. Henry D. Didama.
9. "The Faculty," Dr. Samuel B. Ward.

"Auld Lang Syne" was then sung, and the toastmaster, in a few remarks, declared the reunion of 1901 at an end.

Public Health

Edited by Joseph D. Craig, M. D.

DEPARTMENT OF HEALTH—CITY OF ALBANY, N. Y.

ABSTRACT OF VITAL STATISTICS, APRIL, 1901

Consumption	23	Albany City Hospital	11
Typhoid fever.	2	St. Peter's Hospital..	3
Scarlet fever.	1	Homeopathic	2
Diphtheria	5	County House.	1
Chicken-pox.	0	Penitentiary	0
Whooping-cough.	0	St. Margaret's Home	0
Cholera infantum	0	Little Sisters of the	
Measles	1	Poor	3
Erysipelas.	0	Home of the Friend-	
Influenza	3	less	0
Small-pox	0	Hospital for Incura-	
Pneumonia	13	bles.	1
Broncho-pneumonia	5	Home of the Aged	0
Apoplexy	14		
Bright's disease	17	Total deaths.	156
Cancer	3	Rate.	17.08
Accidents & violence.	6	Births	92
Seventy years & over.	25	Marriages	44
One year or under	25		

FORMALDEHYDE AS A DISINFECTANT

As a result of a review of French literature on disinfecting by formaldehyde, by Assistant Surgeon S. P. Gruble, it appears to be a recognized fact that formaldehyde gas is a surface disinfectant only and will not penetrate deeply into the bedding and the like. The lack of penetrating power of this gas seems to be that when it comes into contact with any fibrous or porous body it changes its form and polymerizes into an inert solid.

OHIO SANITARY BULLETIN

It is unfortunately true that there is still a large unvaccinated population in Ohio, and with the many centers of infection, and the little dread people have of the present

mild form of the disease (in many cases not calling a physician when ill with the disease), we may expect small-pox to continue in spite of all efforts of the State and local authorities.

THE DIPHTHERIA BACILLUS

Minnesota State Board of Health Report.

Mild throat infections may be produced by the diphtheria bacillus and moreover these infections are infectious.

In Memoriam

ASAHEL BURT, M. D.

Dr. Asahel Burt died at Wakefield, Clay County, Kansas, of dropsy, April 5, 1901, aged seventy-two. Dr. Burt was a student in the Albany Medical College under the preceptorship of Professor Quackenbush, and graduated December 23, 1861. In August, 1862, he was appointed Assistant Surgeon, and on September 4th of the same year was mustered in with the 139th New York Volunteers. During his first year of service he was at Hampton Hospital, and afterward went with his regiment to Williamsburgh. While at Williamsburgh he was for several months in charge of the Eastern State Lunatic Asylum, an institution then accommodating about three hundred patients. During the struggle at Cold Harbor, Dr. Burt was Division Surgeon, and for twelve days was under fire, at a time when surgeons were "knocked out by dozens." He was the first medical officer to enter Richmond after the surrender. At the beginning of the campaign of 1865 he had been made chief Operating Surgeon of the 24th Corps. After the war Dr. Burt settled in Kansas where he practiced until late in the eighties. Since that time he lived quietly in retirement. Of his life in Kansas, as well as of his experiences in the Civil War, he has given a brief and interesting sketch in a letter written for Alumni Day, 1898, which was read at the meeting of the Association and published in the Proceedings of that year. He closed it with a poetic sentiment of loyalty to the graduates of his *alma mater*, in full satisfaction of a life well spent and awaiting its final summons.

Medical News

Edited by H. Judson Lipes, M. D.

MEDICAL SOCIETY OF THE COUNTY OF ALBANY.—The annual meeting was held May 14, 1901, in Alumni Hall. The President and Vice-President both being absent, the meeting was called to order by the Secretary at 9:05 P. M. The following members were present: Ira Applebee, O. D. Ball, E. A. Bartlett, George Blumer, T. L. Carroll, Spencer L. Dawes, Arthur W. Elting, W. H. George, W. S. Hale, Wm. H. Happel, E. H. Hinman, H. Hun, L. LeBrun, Howard E. Lomax, Andrew MacFarlane, C. H. Moore, S. R. Morrow, J. Montgomery Mosher, W. H. Murray, C. L. Myers, L. H. Neuman, G. W. Papen, H. S. Pearse, Thomas A. Ryan, Arthur Sautter, H. L. K. Shaw, B. U. Steenburg, W. O. Stillman, T. F. C. Van Allen, Edgar A. Vander Veer, William J. Wansboro, J. B. Washburne.

Dr. MOSHER proposed that Dr. T. F. C. Van Allen be elected Chairman of the meeting. The motion was seconded and carried.

1. Reading of the minutes of the last meeting.

It was moved by Dr. NEUMAN that as the minutes had already been printed they should be adopted as printed. The motion was seconded and carried.

2. There were no minutes of special meetings.

3. Reading of the reports of officers and committees.

The Treasurer's report was read by the Treasurer, Dr. W. H. GEORGE, as follows:

"To the President and Members, County Medical Society of Albany:

The Treasurer would respectfully offer the following report for the year. Cash on hand at last annual meeting \$201.54; collections during the year \$108.00; total of \$309.54. Expenses during year \$111.95; balance \$197.59. Check No. 33 uncashed at bank \$4.00. Grand total in bank to-day \$201.59."

A motion was made that the report be referred to an auditing committee. The motion was seconded and carried. The Chairman appointed Drs. Hinman and Bartlett as the committee.

Dr. STILLMAN then reported for the Board of Censors. He stated that three names, those of Dr. George Linus Streeter, Dr. Benno G. Troidle and Dr. Frederic Crounse had been favorably considered by the Censors. No other business had come up during the year. A motion was made that the report be accepted, and that the names passed upon be balloted for as usual.

Dr. PEARSE then reported for the Committee on Legislation. It was stated that some 268 bills of a medical character had come before the legislature this year, 97 of which had been signed by the Governor. Some had passed one house but had been vetoed by the other. Some had been vetoed by the mayors of cities. The most important bills was one appropriating \$100,000.00 for the erection of a State Hospital for Tuberculosis, and one appropriating \$20,000.00 for an Antitoxine Laboratory. The legislature had also abolished the State Board of Health

and established a State Department of Health with a single commissioner. The Christian Science bill had been defeated, as had the Osteopath bill.

4. Election of members. It was moved that the Secretary cast one vote for the three gentlemen passed upon by the Board of Censors. The President declared Drs. GEORGE L. STREETER, B. G. TROIDLE and FREDERIC CROUNSE to be elected members of the Society.

5. Motions and resolutions. Nothing came up under this head.

6. Miscellaneous business. Under this head the Secretary read the following letter which had not yet been acted upon:

ALBANY, N. Y., February 1, 1901.

To Presidents and Secretaries of County Medical Societies:

At the recent meeting of the Medical Society of the State of New York, the following recommendation, made by the Committee on the President's Inaugural Address, consisting of Drs. William S. Ely, of Rochester, A. Vander Veer, of Albany, and D. B. St. John Roosa, of New York, was adopted:

"Your Committee believes that it is desirable to increase the facilities for becoming Permanent Members of the Society, and hence we recommend such change in the Constitution and By-Laws as will permit each County Medical Society to send any number of delegates not exceeding five for each Assembly District, to each annual meeting of this Society, the present rules to obtain as to such delegates becoming Permanent Members."

Under this change in the By-Laws your Society is entitled to send five delegates, or such number less than five as you may see fit, instead of one, as heretofore, for each Assembly district in your county. The annual dues of your Society are not hereby increased. On completion of the term of delegacy, if registered as having attended two annual meetings, delegates become eligible to permanent membership. Delegates are in every sense members of the Society during their delegacy and can subsequently, if they so desire, become permanent members.

It is requested that you bring this to the notice of your Society at its next meeting and inform your members fully of its provisions.

Provision was also made for a semi-annual meeting of the Society for scientific purposes only during the year, and such a meeting is in contemplation, to be held in New York in the early autumn.

Yours faithfully,

F. C. CURTIS, *Secretary*.

HENRY L. ELSNER, *President*.

The Chairman stated that according to this, sixteen delegates could be elected. He pointed out, however, that there was a resolution adopted October 11, 1892, which read as follows: "That hereafter in the election of delegates to the Medical Society of the State of New York no member shall be eligible to such office unless he shall have read at least three papers before this Society and has been a member for three years."

Dr. HUN made a motion that this resolution be suspended for the time being. The motion was seconded and carried.

Dr. MOSHER made a motion that the Secretary write to the President

and express the sympathy of the Society on account of his illness. The motion was seconded and carried.

7. Amendment of By-Laws. There was no business under this head.

8. President's address. Owing to the illness of the President, Dr. Wm. Hailes, the President's address was not delivered.

9. Election of officers and delegates.

The Chairman stated that the first officer to be elected was the President for the ensuing year. The President asked the wish of the Society as to whether they would like an informal ballot or to have nominations made. The motion was made and seconded that the method of procedure by nominations should be the form of election.

Dr. STILLMAN nominated Dr. W. H. Murray. Dr. T. L. Carroll nominated Dr. W. H. Happel.

The Chairman then appointed Dr. E. Vander Veer and Dr. H. S. Pearse as tellers.

The Committee on the Treasurer's Report reported that they had examined the Treasurer's figures and found them to be correct. Dr. Pearse then read the result of the first ballot, which gave Dr. Happel and Dr. Murray each thirteen votes. A second ballot was then taken. Dr. Pearse declared the result of the second ballot to be that Dr. Murray received fifteen votes and Dr. Happel thirteen. The Chairman announced that Dr. Murray was elected to the office of President.

The Chairman then stated that nominations were in order for a Vice-President. Dr. Ryan proposed Dr. Happel for the office. Dr. Happel declined. Dr. MacFarlane proposed Dr. Blumer. Dr. Blumer declined. Dr. Stillman proposed Dr. Andrew MacFarlane. It was moved that the Secretary cast one vote for Dr. Andrew MacFarlane for the office of Vice-President. The motion was seconded and carried. The Chairman declared Dr. MacFarlane elected to the office of Vice-President.

The Chairman then declared the nominations for the Secretary to be in order. Dr. Morrow proposed the name of Dr. Pearse. Dr. Hun seconded the motion and moved that the Secretary cast one ballot for Dr. Pearse. The motion was seconded and carried. The Chairman announced Dr. Pearse elected to the office of Secretary.

The Chairman announced that nominations for the office of Treasurer were in order. Dr. Hun proposed the name of Dr. W. H. George as Treasurer. Dr. Stillman seconded the nomination. Dr. Bartlett moved that the Secretary cast one ballot for Dr. George. The motion was seconded and carried. The chairman declared Dr. George elected to the office of Treasurer.

The Chairman declared the nominations for Censors were in order. Dr. Hun made a motion that the present Board be renominated. Dr. Stillman and Dr. Ryan declined renomination. Dr. Stillman proposed the names of Dr. Hun and Dr. Carroll to be added to the three remaining Censors. The motion was seconded and carried. It was moved that the Secretary cast one vote for the following gentlemen for Censors: Drs. Hun, Archambault, Featherstonhaugh, Lochner and Carroll. The motion

was seconded and carried. The Chairman declared the above mentioned gentlemen elected to the office of Censors.

The Chairman declared nominations were in order for the office of Delegates to the Medical Society of the State of New York. Dr. Mosher proposed the following sixteen names: Drs. Pearse, Theisen, Blumer, Case, Bartlett, Lochner, Murray, Archambault, Sautter, Sabin, Wiltse, C. H. Moore, Babcock, Elting, Lipes and Shanks.

Dr. Carroll proposed the name of Dr. Thomas Ryan. Dr. Sautter proposed the name of Dr. T. L. Carroll. Dr. MacFarlane proposed the names of Dr. E. Vander Veer and Dr. H. L. K. Shaw. Dr. Hun made a motion that Drs. Ball, Sautter and Mosher be appointed a committee to select a list of sixteen delegates from those whose names have been proposed. The motion was seconded and carried. The committee then reported the following as their choice for delegates: Drs. Pearse, Theisen, Blumer, Case, Bartlett, Murray, Archambault, Sautter, Sabin, C. H. Moore, Babcock, Elting, Ryan, Carroll, E. Vander Veer and Shaw.

The motion was made and seconded that the Secretary cast one vote for the gentlemen mentioned. The Chairman declared them elected to the office of delegates.

The motion to adjourn was made, seconded and carried.

T. F. C. VAN ALLEN, *President pro tem.*

GEORGE BLUMER, *Secretary.*

REPORT OF COMMITTEE ON LEGISLATION.—The Committee on Legislation presents the following report:

The number of bills relating to public medicine presented in the legislature of 1901 exceeded that of any preceding year. The final disposition of these bills is as follows:

Number presented during the session.....	267
Number which died in committee.....	88
Number which died on calendar.....	23
Number vetoed by mayors of cities.....	9
Number vetoed by the Governor.....	14
Number signed by the Governor.....	97
Number which passed one house but failed in the other.....	31

Many of the measures were of great importance and interest to the members of the profession.

\$100,000 was appropriated for the building and equipment of a State hospital for the treatment of incipient tuberculosis.

\$20,000 was appropriated to establish and equip a farm and laboratory for the manufacture and standardization of tetanus streptococcus and diphtheria anti-toxine, and for further investigations in serum therapy. The State Department of Health is to have charge of this expenditure and the plant will probably be located in or near Albany.

The State Board of Health was legislated out of existence and a State Health Commission with a single head substituted.

The bill which placed the Christian Scientists in this State under the same legal control as the general medical practitioner failed to pass.

The bill giving the Osteopaths the right to practice in this State without legal restriction was defeated in committee.

A bill was passed and signed by the Governor which gives the regents discretionary power to divide the State regents examinations in medicine, giving the student the opportunity to pass up in some of the branches at the end of two years.

Respectfully submitted,

ARTHUR G. ROOT, *Chairman.*

WILLIAM J. NELLIS.

HARRY S. PEARSE.

MISSISSIPPI VALLEY MEDICAL ASSOCIATION.—It is announced that the dates of the next meeting of the Mississippi Valley Medical Association have been changed from the 10th, 11th and 12th of September to the 12th, 13th and 14th of September. This change has been made necessary because the dates first selected conflicted with another large association meeting at the same place.

The meeting is to be held at the Hotel Victory, Put-in-Bay Island, Lake Erie, O., and the low rate of one cent a mile for the round trip will be in effect for the meeting. Tickets will be on sale as late as September 12th, good returning without extension until September 15th. By depositing tickets with the joint agent at Cleveland, and paying 50c., the date can be extended until October 8th. This gives members an opportunity of visiting the Pan-American Exposition at Buffalo, to which very low rates by rail and water will be in effect from Cleveland.

Full information as to rates can be obtained by addressing the secretary, Dr. Henry E. Tuley, No. 111 West Kentucky street, Louisville, Ky. Members of the profession are cordially invited to attend this meeting.

Those desiring to read papers should notify the secretary at an early date.

ALBANY HOSPITAL TRAINING SCHOOL FOR NURSES: GRADUATING EXERCISES.—Thirteen young women received diplomas from the Albany Hospital Training School for Nurses May 15th. They were: Helen Ruth Scudder, Massachusetts; Marion Gertrude Keffer, Canada; Cordelia Elizabeth Parish, Mary Lord, Constance Evelyn Welsh, Frances Dudley Starbuck, Margaret Mac Alpine Bielby, Margarenia Thomas, Elizabeth Swits Sprague, S. Frances White, Beatrice Marian Welsh, Lena Gallup Vanderzee, Josephine Brown Holten, New York.

The graduating exercises of the class of 1901, the second class to graduate in the brief history of the young training school, were held in the study hall of the Albany Female academy, and were prefaced by the afternoon festivities at the Nurses' Home, when the patronesses of the school gave a tea to the young graduates, Mrs. William L. Learned, Mrs. Samuel B. Ward, Mrs. Simon W. Rosendale and Mrs. Grange Sard acting as the hostesses of the occasion. For the evening exercises, the academy hall was decorated with palms and Elgie's orchestra was stationed at the right of the platform, on which were seated Miss Emily MacDonnell, superintendent of the training school; Mrs. William L. Learned, president of the

board of managers, and members of the board; Hon. William L. Learned, representing the board of governors of the Albany hospital; Rev. Dr. W. W. Battershall, Dr. Albert Vander Veer and Dr. Samuel B. Ward. As large a representation of the nurses as could be spared from the hospital in consideration of the emergency possibilities of the strike made a picturesque showing in their pink uniforms, white caps and aprons, and the auditorium was filled with friends and patrons of the school and hospital. Judge Learned presided, and after the opening prayer by Rev. Dr. Battershall, and music by the orchestra, introduced Dr. Ward, who made the address to the graduating class. Judge Learned presented the diplomas and the exercises closed with a benediction by Rev. Dr. Battershall.

THE DETROIT MEDICAL JOURNAL: A NEW PUBLICATION.—Under the editorship of Dr. G. Archie Stockwell, the J. F. Hartz Co., of Detroit, have begun the publication of a new journal—"a concise monthly epitome of practice and therapeutics." The publishers offer no apology for adding to the already overwhelming list of periodicals.

MEDICAL SOCIETY OF THE STATE OF NEW YORK.—At the 95th annual session of the Medical Society of the State of New York, held at Albany, N. Y., January 29th, 30th and 31st, 1901, it was moved and unanimously adopted that in order to increase the facilities for becoming permanent members of the Society, each County Society should be allowed to send five times the number of delegates it had formerly sent to the State Society. These delegates are elected for a term of three years and are eligible for permanent membership if they register twice during that time. This will make the number of delegates from the County Society to the State Society 750 in all, or one delegate for every eight or nine members of County Societies without increase of expense to the County Societies.

It was further agreed in response to a widely expressed desire, that the Society hold a semi-annual meeting in the City of New York in the early autumn to be devoted entirely to scientific work and social intercourse. The officers of the Society announce that they have engaged the New York Academy of Medicine for this purpose where a meeting of two days duration will be held October 15th and 16th, 1901. Members wishing to read papers are requested to communicate with Dr. Nathan Jacobson, 430 South Salina street, Syracuse, N. Y.; and information of any other nature can be obtained from Dr. Frederic C. Curtis, 17 Washington avenue, Albany, N. Y., or from Dr. Frank Van Fleet, associate secretary, 63 East 79th street, New York. It is further announced that the Society will tender a reception to its members, delegates and guests on the evening of October 15th at Delmonico's. Tickets of admission to this reception will be furnished without cost to all who register at the semi-annual meeting as well as to the Society's guests.

THE AMERICAN SURGICAL ASSOCIATION.—Under the presidency of Dr. Roswell Park, of Buffalo, a most interesting meeting was held at Baltimore on the 7th, 8th and 9th of May. The president's address was on the

subject of "Some Phases of the Cancer Question," and was an excellent résumé of the work that had been done under State control in the laboratory at Buffalo. We trust that his earnest expectations may be realized, and that Dr. Park, with Dr. Gaylord have succeeded in discovering the cause of cancer. There were many excellent papers read, and the demonstration of the methods of instruction at the Johns Hopkins Hospital was very interesting. The attendance was unusually large, a greater number than has been known for several years. Dr. Albert VanderVeer and Dr. W. G. Macdonald represented Albany, and as one of the senior fellows of the Association Dr. R. B. Bontecou, of Troy, was also present. It will be pleasant news to our readers that the next meeting is to be held in Albany on the 20th of May, 1902. This will be the first gathering of the kind that has ever assembled in Albany, and should receive a warm reception from the profession here. Dr. Nathan Jacobson, of Syracuse, was elected a fellow. Dr. DeForest Willard, of Philadelphia, was elected president for the ensuing year.

PROVISIONAL PROGRAM

OF

CLINICAL DAYS AT THE ALBANY HOSPITAL, JULY AND AUGUST, 1901

Tuesday, July 2nd

- 10 a. m.—Introductory address by Albert Vander Veer, M. D., senior surgeon to the hospital.
- 11 a. m. to 1 p. m.—Demonstration clinic in surgery, diagnosis and operations, by Albert Vander Veer, M. D., and Willis G. Macdonald, M. D.

LUNCHEON AT ALBANY CLUB

- 2:30 p. m.—Bender Laboratory. General remarks on the use of the microscope. Method of examination for the tubercle bacillus, by George Blumer, M. D.
- 3:30 p. m.—Clinical lecture on chronic nephritis, by Samuel B. Ward, M. D.

Tuesday, July 9th

- 10 a. m.—Address in clinical gynecology, by James P. Boyd, M. D.
- 11 a. m.—Demonstration of cases in the surgical wards, by W. G. Macdonald, M. D.
- 12 m.—Practical demonstration of methods for sterilization of dressings, instruments and water adapted to private practice, by C. H. Richardson, M. D.

LUNCHEON AT ALBANY CLUB

- 2:30 p. m.—Bender Laboratory. The microscopic examination of urine: The significance of blood, pus and crystals; A. W. Elting, M. D.
- 3:30 p. m.—Clinical lecture on locomotor ataxia, by Henry Hun, M. D.

Tuesday, July 16th

- 10 a. m.—Demonstration of the use of the Roentgen ray in the treatment of fractures and dislocations, by William Hailes, Jr., M. D.

- 11 a. m.—Clinical demonstration in abdominal surgery, by W. G. Macdonald, M. D.
- 12 m.—Improved methods in the application of plaster of Paris dressings for the treatment of deformities, by A. W. Elting, M. D.

LUNCHEON AT ALBANY CLUB

- 2:30 p. m.—Bender Laboratory. The microscopic examination of urine; the origin and significance of casts, by A. W. Elting, M. D.
- 3:30 p. m.—Application of the modern instruments of precision for diagnoses, by H. Van Rensselaer, M. D.

Tuesday, July 23d

- 10 a. m.—The Roentgen ray in the diagnosis of foreign bodies (lodged), of biliary and renal calculi, of tumors, of diseases of the osseous system, by William Hailes, Jr., M. D.
- 11 a. m. to 1 p. m.—Demonstration and diagnosis clinic in surgery, with operations, by Albert Vander Veer, M. D., and W. G. Macdonald, M. D.

LUNCHEON AT ALBANY CLUB

- 2:30 p. m.—Bender Laboratory. The methods of blood examination; red blood corpuscles, leucocytes, hæmoglobin, by A. W. Elting, M. D.
- 3:30 p. m.—Modern methods of quarantine and disinfection, by Joseph D. Craig, M. D., health officer of the city of Albany.

Tuesday, July 30th

- 10 a. m.—Clinical demonstrations in dermatology, by Arthur Sautter, M. D.
- 11 a. m.—Catheters; their care and preservation, catheterization in stricture and enlarged prostate, by W. G. Macdonald, M. D.
- 12 m.—Demonstration of methods in infant feeding; the care of infants, at St. Margaret's Home, by H. L. K. Shaw, M. D.

LUNCHEON AT ALBANY CLUB

- 2:30 p. m.—Bender Laboratory. The diagnostic value of blood examinations; anæmias, leukæmias, infectious processes, etc., by A. W. Elting, M. D.
- 3:30 p. m.—Modern methods in the diagnosis of cancer of the stomach, by A. MacFarlane, M. D.

Tuesday, August 6th

- 10 a. m.—Demonstration of the obstetrical methods employed in the Albany hospital, by William H. Happel, M. D.
- 11 a. m.—Diagnosis clinic in pelvic and abdominal diseases, examinations under anæsthesia, by W. G. Macdonald, M. D.
- 12 m.—The treatment of deformities of the feet; tendon transplantation, by Arthur W. Elting, M. D.

LUNCHEON AT ALBANY CLUB

- 2:30 p. m.—Bender Laboratory. The value of uterine scrapings in diagnosis, by George Blumer, M. D.

3:30 p. m.—Clinical demonstration in gastro-enteric diseases, by Leo H. Neuman, M. D.

Tuesday, August 13th

10 a. m.—Methods of sterilization with particular reference to their adaptability to the wants of the general practitioner, by C. H. Richardson, M. D.

11 a. m. to 1 p. m.—Clinic in gynecology and abdominal surgery, by W. G. Macdonald, M. D., C. H. Richardson, M. D., and A. W. Elting, M. D.

LUNCHEON AT ALBANY CLUB

2:30 p. m.—Bender Laboratory. The significance of the Widal reaction; the methods and significance of examinations for the gonococcus, by George Blumer, M. D.

3:30 p. m.—Clinical lecture on chorea and choreiform affections, by J. M. Mosher, M. D.

Tuesday, August 20th

10 a. m.—Demonstration clinic in diseases of the nose and throat, by Arthur G. Root, M. D.

11 a. m.—Demonstration of cases in the surgical wards of the hospital.

12 m.—Demonstration of the use of the endoscope and cystoscope in diseases of the genito-urinary tract.

LUNCHEON AT ALBANY CLUB

2:30 p. m.—Bender Laboratory. The value of bacteriologic examinations in cases of suspected diphtheria, with remarks on antitoxin, by A. W. Elting, M. D.

3:30 p. m.—Rheumatism and rheumatoid affections, by A. MacFarlane, M. D.

Tuesday, August 27th

10 a. m.—Demonstration clinic in diseases of the nose and throat, by Arthur G. Root, M. D.

11 a. m.—Clinic in surgery, by W. G. Macdonald, M. D., A. W. Elting, M. D., and C. H. Richardson, M. D.

12 m.—Demonstration of clinical methods in diseases of the eye and ear, by C. S. Merrill, M. D.

LUNCHEON AT ALBANY CLUB

2:30 p. m.—Filtration Plant. Bacteriological examination of drinking water; its value and demonstration of methods employed at the Albany filtration plant.

3:30 p. m.—Demonstration of the methods for collection, transportation and the physical and chemical examination of potable water, by Willis G. Tucker, M. D.

Physicians who desire further information in reference to the above program can obtain full details by addressing

Dr. EDGAR A. VANDER VEER,

Secretary of the course,

28 Eagle street, Albany, N. Y.

Book Reviews

Transactions of the College of Physicians of Philadelphia. Third Series. Volume the Twenty-Second. Philadelphia. Printed for the College. 1900.

The value of publications of this kind lies in the preservation of a record of the work done by the society represented, and in the progress indicated from year to year in the science of medicine and surgery. The individual contributions have been largely published elsewhere, but secure permanency in the "Transactions." The Philadelphia College of Physicians has an honorable record, both in its antiquity, its foundation dating from 1787, and in its membership, which includes names among the greatest in American medicine. The volume for 1900 contains several valuable papers of historical interest, among them, "Some Old Certificates of Proficiency in Medicine," and "Medical Societies in This Country Founded Prior to the Year 1787," by Dr. Francis R. Packard; and "The Manuscript Letters of Jenner in Possession of the College," by Dr. S. Weir Mitchell. The Symposium upon the Fifth Nerve, for which a special meeting was arranged on April 20, 1900, covers fully the present knowledge of the painful affections of the face, and the accepted treatment for relief, including the status and technique of operations upon the nerve and the Gasserian ganglion.

The Student's Manual of Venereal Diseases. By F. R. STURGIS, M. D., and FOLLEN CABOT, M. D. Seventh edition, revised and in part re-written. Philadelphia: P. Blackiston's Son & Co., 1012 Walnut Street. 1901.

The volume was especially written for, and dedicated to the medical students of the United States. The 207 pages of subject matter are divided into twelve chapters which deal with the general subject of the venereal disease from the medical standpoint. Chapters one and two are devoted to a discussion of the simple venereal ulcer and its treatment. Chapters three to nine are devoted to the subject of syphilis and its treatment, and chapters ten to twelve are devoted to gonorrhœa, its complications and the general indications for treatment.

The writers have not attempted to consider the various phases of venereal diseases in detail, but have confined themselves to a brief discussion of the most important points connected with each of the manifestations of venereal infection, those points especially with which the student should be familiar. Facts and ideas are clearly and concisely expressed and are so arranged as to impress themselves on the mind of the reader. The pathological considerations are not in all respects the most modern, and it is rather difficult to understand just what is meant by a "sympathetic bubo."

The treatment receives brief, but adequate discussion and prescriptions are given for each of the conditions described.

As a hand-book for the student of medicine this volume supplies a decided need and should receive cordial endorsement.

A. W. E.

ALBANY MEDICAL ANNALS

Original Communications

THE PULMONARY FORM OF INFLUENZA.*

By HOWARD VAN RENSSELAER, PH. B., M. D.,

Professor of Therapeutics in the Albany Medical College.

Although numerous cases of influenza occur, as in the purely toxic forms, without any symptoms whatsoever referable to any portion of the organs concerned in respiration, yet it is a well recognized fact that by far the most frequent and important inflammatory lesions are found in the different portions of the mucous membranes of the respiratory tract, from the nose down to the alveoli of the lungs. That this should be so is readily explainable from the knowledge that we now possess of the life history of the influenza bacillus.

This micro-organism, according to the researches of Pfeiffer, has but very little resisting power. It has been found, for example, that it is readily destroyed by antiseptics or by heat; and, from our standpoint as clinicians, those experiments are of especial importance which have proved that the bacilli die within two days in dried sputum, and also that they are unable to multiply in water.

These researches tend to prove almost certainly that the disease is not an infectious one, but that it is actually directly contagious from a person who is ill from influenza. The observations of numerous physicians in tracing the progress of the disease in isolated communities tend to confirm also this theory of contagion. Especially interesting also in this connection, as showing

*Read before the Medical Society of the County of Albany, January 16, 1901.

how the germs may get into the respiratory tract, are the experiments of Flügge, who has demonstrated that in the act of coughing, sneezing, and even speaking, minute globules of water and of nasal and bronchial secretions laden with micro-organisms are diffused into the air surrounding the individual, and that these particles are capable of remaining in the air for hours, and can be inhaled therefore readily by whomsoever comes into the neighborhood of the affected person.

All bacteriologists are agreed that in the nasal and bronchial secretions, and in the saliva as well, of patients suffering from grippe, countless influenza bacilli are found, and also, curiously, that they are not found as a rule outside of the respiratory tract.

The influenza bacilli, then, are taken into the body by inhalation, and fall sometimes upon one and sometimes upon another portion of the respiratory tract, and where they lodge they set up the characteristic pathological changes which were described in a previous paper. But while these germs enter the body during the process of respiration, it does not follow at all that they always or even regularly excite a catarrhal process in the nose, which then spreads by extension to deeper lying sites of the respiratory tract. Each individual division may be the seat of the primary invasion without any other portion being involved at all.

An inflammation circumscribed to the nasal fossæ is frequent; we also see cases where the larynx alone is more or less affected; so also the larger bronchi may be first attacked, or the bronchioles may be inflamed at the start, and even the alveoli themselves can be the primary and exclusive seat of the lesion. It is important to remember that an acute primary influenza pneumonia may be developed with the various signs characteristic of the disease without any premonitory symptoms of an ordinary grippe.

To these remarks just made, that each single portion of the respiratory tract might be primarily and exclusively affected, must be added the statement that as a rule the inflammatory process is a progressive one, and extends over several portions of the mucous membrane. As it is more convenient for us, we will consider now separately the symptomatology of these individual portions of the respiratory tract, remembering, however, that we are apt to get a complex of symptoms depending upon the number and sites of the portions which are involved.

THE NASAL FOSSÆ AND CONTIGUOUS CAVITIES

In many cases there is a well marked rhinitis; the patients complain of running from the nose and loss of the sense of smell. The entire appearance of the patient, as the inflamed nostrils, the redness and swelling of the eyelids, the conjunctivitis, the watery eyes, the congestion of the face and forehead, together with the fever, presents a typical picture of a severe coryza, with the exception, perhaps, that in influenza there is very little sneezing, and but little watery discharge from the nose.

The catarrhal process very frequently extends up into the frontal sinus, and also into the antrum of Highmore, and the inflammation sets up the often long continued frontal headache, from which so many suffer; and, sometimes a supraorbital or intraorbital neuralgia has its origin in the influenzal inflammation. Epistaxis is an infrequent occurrence.

THE LARYNX

The larynx is involved probably oftener than is supposed, but in the absence of a laryngoscopic examination it is easily overlooked. When symptoms are present they are usually, a huskiness of the voice increasing sometimes into aphonia, and a somewhat stridulous cough, with occasionally the symptoms of stenosis.

THE TRACHEA AND BRONCHI

Hyperæmia and inflammation of the trachea and bronchi are among the most frequent and important symptoms of the influenza processes. The tracheal inflammation manifests itself by a tickling and burning pain along the trachea and under the upper portion of the sternum; pressure over this region is painful and excites coughing. A convulsive kind of cough accompanies this inflammation, increasing sometimes almost to the point of suffocation. This symptom is thought by some observers to be a nervous reflex cough, from the direct irritation of the cerebro-spinal centers for coughing, which are stimulated by the influenza toxins. According to the observations of Leichtenstern and others, this cough is due to the inflammation of the trachea itself, and is not a reflex symptom.

The bronchial influenza is usually distributed over the entire surface of the larger bronchi on both sides of the chest, but sometimes it seems to be sharply confined to a single lobe. This latter

is an important peculiarity of the grippe bronchitis, and seems to be due to the localized development of the specific bacilli.

According as the character of the bronchitis is dry or moist we hear on auscultation dry, sibilant and sonorous rales or more or less profuse moist rhonchi; with the greatest variety of sounds consequently in different chests. Sometimes marked dyspnoea occurs, but unaccompanied by any positive physical signs. It is probably due to an acute congestion without any œdema.

The amount of sputum in the bronchial variety differs greatly; in general it is a rather copious expectoration, sometimes being exceedingly profuse. When it is allowed to stand in a glass, a grayish foam forms on top; below this is a deep, dirty, serous liquid in which a few fatty pus cells are floating; on the bottom of the glass is a thin layer of either a translucent mucus or a dark mass of detritus. In the early stage of the disease the sputum is scanty, nummular in appearance, and is composed mostly of pus cells; it resembles the sputum raised from the cavity of a phthisical patient. Occasionally the sputum is streaked with blood.

If the influenza bronchitis spreads down into the finer bronchi, dyspnoea and cyanosis develop, symptoms which in old, decrepit persons, and in those who are consumptive, or whose systems have been weakened from any cause, lead to an unfavorable prognosis.

INFLUENZA PNEUMONIA

Pneumonia is perhaps the most frequent and important complication of influenza, and is the usual cause of death in this disease. The majority of observers, both from the clinical and anatomical aspects, are now agreed that the true influenza pneumonia is a catarrhal or broncho-pneumonia in which the influenza bacilli are in pure culture. But while these cases are the most frequent, it is equally true in most epidemics that a considerable number of the cases of complicating pneumonia are of the ordinary croupous or lobar variety, excited by the diplococcus lanceolatus, and also we find in a proportion of cases that the streptococcus pyogenes, or the staphylococcus aureus is abundant, and that the process is a mixed infection. A curious fact in this connection was discovered by Grassberger, who found that in the presence of the staphylococcus aureus, or in a media in which this germ had been cultivated, the influenza bacilli grew luxur-

iantly. At the bedside, however, it is often impossible to distinguish between these different inflammatory processes, and even at the autopsy there are times when the differential diagnosis is difficult.

The onset of the pneumonia in influenza varies considerably. Sometimes cases are seen where a distinct rigor is the first symptom, and without any previous manifestations of influenza; that is, it is a primary process. The catarrhal as well as the croupous varieties can begin this way. More frequently by far the pneumonia follows the symptoms of the influenza. The development is then a more insidious one. High fever, without chill, increasing dyspnoea, more violent cough, nummular sputum, sticking pains, are the symptoms that indicate that the process has extended into the alveoli. Sometimes after one or more days of the ordinary symptoms of influenza there seems to be a recrudescence of the fever, which, in reality, is the initial symptom of the slowly developing pneumonia. Sometimes even the symptoms of the pneumonia seem to develop first during the period of convalescence.

Although all the appearances such as chill, high fever, panting respiration, stabbing pain, and even a typical nummular sputum point to pneumonia, yet the physical signs may be indistinct for several days, and then the signs may be detected over a very limited area at first, and are sometimes misleading. These physical appearances are not the distinct ones of an ordinary lobar pneumonia; one detects instead, at first a small area of localized incomplete dullness, not larger perhaps than a silver dollar; percussion of the rest of the lung elicits a normal note. These spots of partial dullness might be easily overlooked by themselves, but in addition one can hear over these areas broncho-vesicular breathing and voice sounds, together with some very fine moist rales. Sometimes there is no absolute dullness nor true bronchial breathing during the entire progress of the disease.

A frequent characterization of the grippe pneumonia is the gradual spreading of the inflammatory process from one lobule to another, producing ever larger patches of consolidation; and often seeming to spread from one side of the chest to the other. The lobular development of the infiltration belongs to both the catarrhal and the croupous forms of pneumonia. In some cases it seems that resolution is going on in one portion of the lung and

commencing consolidation in another; these pathological conditions are liable to produce of course a great variation in the temperature curve as well as in the physical signs. In some cases the development and progress of the pneumonia infiltration is very much slower than an ordinary lobar or lobular pneumonia; in other cases it is exceedingly rapid, crisis and resolution occurring as early as the eighth day.

Occasionally the process and fever curve seem to be intermittent. The sputum in different cases shows great variations; often we have the abundant serous foamy variety, sometimes blood stained, often a purulent nummular form; *i. e.*, there is nothing characteristic about it to distinguish it from the sputum of the bronchial influenza.

There are some other symptoms of the grippe pneumonia which differ from a typical lobar pneumonia. For instance, instead of the pneumonia flush, that is, the bright red spot over the malar bone, when the face is touching the pillow on that side, a sign which is seen so often in true pneumonia, we find in the grippe pneumonia a flush that spreads over the forehead and about the nose and the eyes. Then in the influenza pneumonia we are liable to have a profuse sweat almost from the beginning of the disease, and then also there are often the peculiar spasmodic attacks of coughing.

As far as the temperature curve is concerned, the general rule is, that with the onset of the pneumonia it suddenly rises high and continues so till the crisis. In the slow developing cases it rises slowly, in the step-like form that is often seen in typhoid fever; or it may be seen as a remittent or even an intermittent variety. The height of the pyrexia often bears no relation to the extent of the inflammatory process, nor to its severity. Defervescence for the most part is not by a true crisis, though that sometimes occurs. The fever usually goes down by lysis, though sometimes pseudo-crises are seen, cases in which the temperature suddenly falls, only to be followed by an exacerbation of fever shortly afterwards. This may be repeated on several days.

Sometimes resolution is very incomplete and it takes a long time for the lung to clear up. Sometimes it is so long prolonged that it resembles very closely indeed tuberculosis, especially if the lesion is in an upper lobe, or if the individual has tubercular tendencies. In these cases repeated examination of the sputum for

the tubercle bacilli is important in making the differential diagnosis. Occasionally the process ends in chronic intestinal pneumonia, or in abscess or gangrene, and some times the patient really becomes tubercular.

THE PLEURA

The pleura is sometimes also involved, secondarily usually to the pneumonia; it may be fibrinous, sero-fibrinous or an empyema. Occasionally the pleurisy is a very early and severe complication, with the ordinary physical signs of empyema. This variety is often followed by death.

TUBERCULOSIS AND INFLUENZA

The mortality statistics of all countries agree that during an epidemic of influenza the mortality of consumption is markedly increased, and all practitioners agree that the course of consumption is very unfavorably affected by influenza, and especially by its pneumonia complications.

Latent tuberculosis is frequently awakened, healed consumption breaks out again, the chronic cases which are practically fever free are changed into the hectic variety, or hurried into a galloping consumption, and often hemoptysis occurs where it never appeared before. Thus the influenza bacillus seems to pave the way for the spread of the tubercle bacillus. On the other hand numerous consumptives have had the grippe, and even with the pneumonia complications, and survived the epidemic of influenza. Leichtenstern deduces two conclusions from these tuberculous cases: (1) that persons well advanced in consumption, who have ordinarily a well marked protection against acute infectious diseases, are not immune against influenza; (2) that these same consumptives who contract grippe frequently get a pneumonia with it, which, with the exception of influenza, is of the very greatest rarity.

In thinking over then the great extent of the mucous membrane of the respiratory tract that may be involved and the liability of the influenza process to attack several portions at the same time, and also how often atypical cases are observed, it is easily conceivable how variable may be the symptoms, and how complex may be the clinical picture of this interesting disease, even when the lesions of the influenza are confined to the respiratory tract alone.

THE OCULAR COMPLICATIONS OF INFLUENZA.*

By CHARLES H. MOORE, M. D.,

Instructor in Ophthalmology and Otology, Albany Medical College;
Ophthalmic and Aural Surgeon, Troy Hospital, and Child's Hospital, Albany, N. Y.;
Assistant Ophthalmic and Aural Surgeon, Albany City Hospital.

For twelve consecutive years, has the disease known as influenza, la grippe, or by the terse Anglo-Saxon word grip, appeared in our midst during the colder months of the year with unvarying regularity. As it has shown itself to be no respecter of persons, occurring in childhood, as well as in old age, the rich as well as the poor feeling its power, so likewise no part of the human organism seems to be exempt from its influence. As one writer succinctly remarks:

"Grip is very versatile in its handling of the human body and hardly any part of it has been overlooked in making its rounds."

Such an important organ as the eye, with its elaborate blood and nerve supply, could therefore hardly escape in every instance, and it is the purpose of this paper to consider, somewhat briefly, the ocular complications of influenza.

We find, referring to the literature on this subject, that it was very voluminous following the epidemic of 1889-1890, later years showed a marked falling off in the number of articles written, and we note an increase again within the last two or three years in this respect.

No doubt many cases attributed to the influence of the influenza were so attributed on very meager evidence, and later research proved the falsity of the position first taken.

Still, as the epidemics themselves have varied in character and intensity, the complications also would vary in like manner. The State Board of Health has recently issued a circular on the epidemics of influenza in which this variance in the characteristics of the different epidemics is set forth.

But to come more particularly to our subject, "The Ocular Complications of Influenza," to what extent is this disease responsible for troubles relating to the eye. Some pathologists¹ have even gone so far as to claim that the grip poison first finds its lodgment in the eye, and if the conjunctiva is in good condition the chance of an attack of influenza is slight.

Professor Gradenigo,² of Padua, says in an article upon this

*Read before the Medical Society of the County of Albany, March 13, 1901.

subject: "It is certain that in many cases the conjunctiva is the place of entrance for the general infection of influenza."

Knies,³ in his work "The Eye in General Diseases," however, states that the complications and sequelæ of an ocular nature are comparatively few and are to a certain extent such as may be observed in other acute infectious diseases.

Certainly; it is a fact, in view of the great number of cases of influenza that have occurred, serious ocular complications are seldom seen, and fortunately is this the case, for were it otherwise, the advent of this disease would not be regarded with the equanimity that it now is.

There has been some diversity of opinion as to the manner in which the eye becomes affected.

Hessberg⁴ notes three ways by which this may be accomplished:

1st. In a direct manner, by means of bacilli or the toxin produced thereby.

2nd. In an indirect manner, through exhaustion and disturbed nutrition in all tissues of the body.

3rd. A predisposition in the body, to certain pathological change, which owing to the weakened physical condition, becomes manifest during the course of the influenza or subsequent thereto.

This same writer also states, that these various eye affections have no characteristics differing from those following or accompanying other infectious diseases.

We will now consider the various ocular manifestations that may appear during the course of or occurring as sequelæ of the grip. Hyperæmia of the conjunctiva is very frequent and may be regarded as one of the symptoms of the disease. Next in frequency are inflammations of the conjunctiva, usually catarrhal or follicular conjunctivitis.

Dr. Alt⁵ of St. Louis describes cases that he saw during the epidemic of 1890, which resembled in appearance gonorrhœal ophthalmia, but differing very materially in one important respect, there was very little discharge and they yielded readily to treatment.

Galezowski and von Hilleman also speak of the readiness with which these cases of conjunctivitis recover and the freedom from serious corneal complications which they present.

Hordeola are not uncommon during the convalescent stage of influenza, and in some instances abscesses of the lid have been

observed. These recover without difficulty after perforation or incision.

More serious complications are inflammations of the cornea.

It is well known that any severe disease which produces a lowering of the nutrition and vitality of the body may be the cause of inflammation and ulcer of this poorly nourished structure, and as in analogous diseases that leave the patient weak and debilitated, we find these troubles occurring, equally so is it the case with the influenza.

Galezowski,⁶ who has observed several cases of superficial keratitis, referred the cause to a neurosis of the trigeminus.

Webster,⁷ of New York, speaks of a similar case, although he does not give the same cause as above. Two cases similar to the above have been observed by the writer, healing with marked corneal opacity. Keratitis dendritica has been reported by Hirschberg, Landsberg and others.

The parenchymatous form of keratitis was first noticed by von Wagenman⁸ in 1897 in connection with the grip, and von Hilbert⁹ in 1898 mentions a case occurring two and one-half weeks after the beginning of the influenza attack, yielding readily to treatment and leaving no corneal scar.

Lachrymal disturbances have also been met with, but in nearly every instance there was a stenosis of the duct or chronic inflammation of the lachrymal sac already in existence. Pignabari,¹⁰ Naples, reports several cases of dacryocystitis and also some cases of dacryoadenitis.

Neuralgias of the eyes and surrounding parts are quite common with pain on moving the eyes and tenderness on pressure upon the eyeball.

Eversbusch was inclined to assume a change in the muscles themselves, but it is the opinion of Knies¹¹ to be mainly a symptom of disease of the mucous membrane in the auxiliary cavities of the orbit, from whence the inflammatory irritation extended to the periosteum of the orbit and the origin of the muscles. We are all familiar with a similar pain that occurs in inflammation of the frontal sinus, and also, although in a lesser degree, in cases of simple coryza.

There have been noticed a number of cases of an infection comparatively rare, when not associated with trauma, that seem to be directly traceable to the influence of the influenza bacillus. I refer to cases of tenonitis, inflammation of the capsule of Tenon.

Professor Fuchs¹² in 1890 published a report of four cases, one suppurative in nature and three non-suppurative. Schapring¹³ and Greef¹⁴ each report similar cases.

Zimmerman,¹⁵ in Knapp's *Archives of Otology*, records at some length a case of orbital cellulitis, combined with primary mastoiditis, and this condition has been observed by others, among them Greef, Pflüger and Borthen.

Among uveal affections, hyperæmia of the iris has been frequently observed.

Andrews¹⁶ of New York reports five cases of severe inflammation of the uveal tract involving iris and choroid occurring in children between seven and nine years of age and eventuating in the loss of the vision of the eyes affected. These cases were subsequent to slight attacks of the grip, and while it was possible that the trouble may have been due to cerebro-spinal meningitis, Dr. Andrews was inclined to attribute it to the influenza attack.

Dr. Alt has also reported cases occurring in 1892, very similar in their nature.

Panophthalmitis has been seen by Lavagna¹⁷ occurring sixteen days after the commencement of the influenza. Valude, as well as others, speak of observing other cases.

Glaucoma appears to have been incited by attacks of influenza. It is well known that any condition that produces debility and depression favors the outbreak of glaucoma, and grip is noted for the marked physical and mental depression that accompanies it. Apart from this factor in producing glaucoma, Gradenigo¹⁸ has noticed even in the earliest stages of the attack of influenza increase in the tension of the eyeball, especially if there is much hyperæmia of the conjunctiva, this latter condition, according to him, being accompanied by an increase of temperature as tested by thermometers adapted to record the temperature on the surface of the eyeball. Rampoldi, Badal, Adler, Eversbush, as well as Webster and Spalding¹⁹ have noted cases of glaucoma. It is interesting to note digressively for a moment that the grandfather of Dr. Spalding in the early part of the nineteenth century during two epidemics of influenza observed an increase in cases of blindness and severe and painful inflammatory diseases of the eye.

It is but a few weeks ago, that the writer was called from the city to see a case of glaucoma, occurring in a lady seventy-four years of age, at that time in the third week of the influenza attack.

About fourteen days after its inception an inflammatory condition developed in the left eye, and at the time of the visit there was marked increase of tension, pupil dilated moderately, cornea anæsthetic, anterior chamber shallow, scleral vessels large and tortuous. There was some pain, but not severe. It was impossible to make an examination of the fundus of the eye owing to a nearly mature cataract, but an ophthalmoscopic examination made some two years before showed at that time a normal fundus. Her refractive condition was hyperopic, she having some four dioptries of hyperopia as was recorded about five years ago. She gave no history of any of the prodromal symptoms of glaucoma prior to this attack. The use of eserine gave amelioration of the symptoms present.

Among diseases of the optic nerve, cases of optic neuritis have been noticed by several observers. Dr. Weeks²⁰ of New York in a paper read before the Academy of Medicine in New York, gave an exhaustive account of cases seen by him of retrobulbar neuritis.

Hansen²¹ also reports a case of acute retrobulbar neuritis ten days after a mild attack. Snell²² and Hartridge²³ speak of cases of double neuro-retinitis resulting in atrophy of optic nerves with much permanent impairment of vision. In 1892 one case of albuminuric retinitis came under the writer's observation in which the grip had preceded the nephritis.

Jackson²⁴ in his work on the Diseases of the Eye, mentions that the lens opacities in incipient cataract, seem to rapidly increase after an attack of the grip and the writer can remember at least two cases in which this occurred.

According to Knies²⁵ affections of the muscles are rare, but Fuchs²⁶ believes that paralysis of accommodation is quite common, being analogous to post-diphtheritic paralysis. This may be due to a paralysis of the ciliary muscle itself, or in connection with a paresis of the oculomotorius.

Dr. Gonzales²⁷ of Mexico, last year reported two cases in which he had very carefully excluded all other etiological factors. Webster, Andrews and Pooley²⁸ likewise record similar cases.

This list could be extended to considerable length if it were necessary. The writer has this day observed a case of weakness of accommodation occurring four weeks after the influenza, but possessing no features different from those frequently observed

after any debilitating disease such as typhoid. These cases of paralysis of the ocular muscles as a rule yield readily to treatment and are not of long duration.

Excessive asthenopia is not uncommon even when unaccompanied by any marked refractive error, the least use of the eyes at close work causing much pain during the post-influenzal period in nearly every instance.

From the foregoing we may summarize the following conclusions:

1. Many cases reported as due to the influenza may need more substantial proof before we accept that as the chief etiological factor.

2. The nervous apparatus of the eye is especially liable to become involved, as the infection of influenza produces a toxin, which has a selective action upon the nervous system.

3. That the ocular manifestations of influenza are usually post-influenzal.

4. That complications arising from metastatic or embolic processes are usually severe in their nature and detrimental to the integrity of the eye.

5. Aside from this the prognosis of these influenzal complications is usually good under proper care and attention.

BIBLIOGRAPHY.

1. *American Journal of Ophthalmology*. May, 1895, p. 130.
2. GRADENIGO. *Allgemeine Wiener medicinische Zeitung*. 1890.
3. KNIES. "The Eye in General Diseases." Ed. 1895, p. 392.
4. HESSBERG. *Centralblatt für Augenheilkunde*. 1894, p. 532.
5. ALT. *American Journal of Ophthalmology*. Feb., 1890.
6. GALEZOWSKI. *British Medical Journal*. March, 1891.
7. WEBSTER. *American Journal of Ophthalmology*. 1894, p. 134.
8. VON WAGENMAN. *Centralblatt für Augenheilkunde*. 1897, p. 623.
9. VON HILBERT. *Centralblatt für Augenheilkunde*. 1898, p. 345.
10. PIGNABARI. *Centralblatt für Augenheilkunde*. 1894, p. 347.
11. KNIES. "The Eye in General Diseases." Ed. 1895, p. 393.
12. FUCHS. *Wiener klinische Wochenschrift*. 1890, No. 11.
13. SCHAPRINGER. *New York Medical Record*. June 14, 1891.
14. GREEF. *Berliner klinische Wochenschrift*. 1890.
15. ZIMMERMAN. *Knapp's Archives of Otology*. Vol. 21, p. 76.
16. ANDREWS. *American Journal of Ophthalmology*. 1895, p. 135.
17. LAVAGNA. *Centralblatt für Augenheilkunde*. 1894, p. 556.
18. GRADENIGO. *Centralblatt für Augenheilkunde*. 1890, p. 508.
19. SPALDING. *Centralblatt für Augenheilkunde*. 1899, p. 512.
20. WEEKS. *New York Medical Journal*. Aug., 1891.
21. HANSEN. *New York Medical Record*. Nov. 8, 1890.
22. SNELL. *Ophthalmic Review*. London, 1892, p. 219.
23. HARTRIDGE. *Ophthalmic Review*. London, 1892, p. 345.
24. JACKSON. "Diseases of the Eye." Ed. 1900, p. 578.
25. KNIES. "The Eye in General Diseases." Ed. 1895, p. 395.
26. FUCHS. "Diseases of the Eye." Ed. 1899, p. 729.
27. GONZALES. *Anales de Optamologia*. Mexico. May, 1899.
28. WEBSTER, ETC. *American Journal of Ophthalmology*. 1895, p. 136.

SCHOOLS FOR THE INSANE.*

BY FRANCIS M. HAMLIN, M. D.,

Late School Teacher at the Willard State Hospital, Willard, N. Y.

[Francis Marion Hamlin was born in Owasco, N. Y., January 11th, 1841. He attended the district school near his home, and soon mastered all that was taught there, and was sent to the academy at Red Creek, N. Y. After completing the course he taught in the school. In September, 1863, he entered the Fort Edward Institute, and graduated with honors in July, 1865. He then began the study of medicine, and in September, 1866, matriculated at the College of Physicians and Surgeons, New York City. He applied himself with such diligence that his health failed before the close of the year and he returned home. He was never robust, and all his life suffered from mental over-exertion. In 1867 Dr. Porter, of Skaneateles, directed his studies, and in December, 1868, he graduated from the Albany Medical College. He did not confine himself to medical research only; he was an expert microscopist, naturalist and botanist. Soon after graduating he opened an office for general practice at Union Springs, N. Y. But wishing to make mental and nervous diseases a specialty, he accepted a place on the staff of the Government Hospital for the Insane of Washington, D. C., where he remained until the autumn of 1878. His health failed and he was obliged to rest for a long time. He spent three winters in Bermuda, where he became greatly interested in the study of conchology. He made an extensive collection of land and sea shells, and wrote a history of the fauna of these islands. During the last few years of his life Dr. Hamlin was in charge of the school for patients at the Willard State Hospital, Willard, N. Y. He died there March 11, 1900, of tuberculosis and chronic nephritis. The impressions he gained from his work are revealed in the following paper, which is a valuable contribution to an important subject in one of the by-ways of medicine and upon which very little has been definitely written. For the preservation of the manuscript and the opportunity for its posthumous publication the ANNALS is indebted to the medical officers of the hospital.]

In the January number of the *British and Foreign Medical Review* for 1845, that great philanthropist and alienist, Dr. John Conolly, writes as follows:

“As the institution of schools in the Hanwell Asylum has been a favorite object of my ambition, but one in which my hopes have been frustrated, in consequence of their suppression by an authority, which I have no power of resisting, it was not without the most singular gratification that I beheld Dr. Falret sitting among his patients, like a father among his children, encouraging them, assisting them, directing them, and promoting all kinds of easy and agreeable intellectual exercises, that might diversify the time for the afflicted objects of his care, and, by gentle efforts, lead perhaps, in not a few cases, to the gradual restoration of those powers with the loss of which all is lost that is worth preserving.

*Read at a meeting of the Willard State Hospital Medical Society, 9 November, 1898.

The tranquillity, the content, the cheerfulness of that little room, I shall never forget; and I trust that the hope such a spectacle inspired of being some day aided in a like attempt among the insane of my own country, will yet be realized before my mortal labors are concluded."

The good doctor then goes on to describe more in detail what he saw in those two great and historic institutions of France, the Bicêtre and Salpêtrière, which are so closely associated with the names of Pinel, Esquirol, Falret and others whose deserved renown in redeeming the insane from their apparently hopeless fate is imperishable.

The idea of teaching the insane seems to have grown out of the efforts to teach idiots, they and the insane both being confined in each of these great institutions.

Leaving the Salpêtrière, Dr. Conolly says: "The first part of the Bicêtre to which I was conducted was a school exclusively established for the improvement of these cases (the idiots) and of the epileptic, and nothing more extraordinary can well be imagined. No fewer than forty of these patients were assembled in a moderate sized school room, receiving various lessons and performing various evolutions under the direction of a very able school-master, M. Seguin, himself a pupil of the celebrated Ward, and endowed with that enthusiasm respecting his occupation before which difficulties vanish."

It is hardly necessary for me to say, I suppose, that this enthusiastic teacher just mentioned is the Seguin who became so justly celebrated afterward for his efforts in behalf of the idiotic in our own country.

Again Dr. Conolly says: "The efforts of M. Falret at the Salpêtrière, for the instruction of the insane, already spoken of, began in 1831 by the establishment of a school in that institution for idiotic females."

It was the continuation of that school which Dr. Conolly first visited and described. Of the school in the other great institution he says:

"The schools for the insane patients of the Bicêtre, who are neither idiots or epileptics, exceed in interest, if possible, those of the Salpêtrière. Male patients are better prepared in general than female patients to derive benefit from such

instruction; they are also more attentive, and perhaps, more able to receive various instruction. Here, too, as in the school at the Salpêtrière, the most cheering thing of all was to see the evident comfort and happiness created by the various and not fatiguing occupations of the schools; to witness the satisfaction with which the afflicted, the paralysed, the utterly incurable exhibited in the performances which they yet retained the power to accomplish. If no other end were answered by the formation of schools, they ought to be established as recreative, palliative, remedial even, in every lunatic asylum."

The pathetic utterance, almost prayer of Dr. Conolly, that he might see such schools established in his own country, appears to have been heard, for Dr. Isaac Ray in his article "Visits to the Principal Hospitals for the Insane in Great Britain, France, etc.," published in the *American Journal of Insanity* for April, 1846, says:

"In a few of the English establishments, some attention has been given to the instruction of the patients, especially at Hanwell (Dr. Conolly's institution) whose chaplain made the discovery, two or three years since, that 'patients who are unable to read, can be instructed in the alphabet and spelling.' I did not see any of their schools in operation, and know nothing more about them than I learn from the published reports.

At St. Yon, the Bicêtre, and the Salpêtrière, schools for instruction in the rudiments of learning form part of the ordinary routine of moral treatment. In the school at the last named hospital, which I had the pleasure of seeing once with M. Batelle, and subsequently with Dr. Falret in the course of his morning visit, the exercises consisted of reading, writing, recitations of pieces committed to memory, and singing, individually or collectively. In the meantime most of them pursued their customary employment of knitting or needlework. Many a countenance beamed with pleasure, and an air of quiet and cheerful interest pervaded the whole school.

The superior docility and flexibility of the French character, permit the use of school instruction in their hospital for the insane, to a much greater extent than would be possible, I think, in ours. Still, in all of them, instruction of some kind or other, may be profitably introduced, for there is time

enough that can not be occupied in any other way, and patients enough who, from disinclination to labor, or a desire of change would be gratified with the employment.

Young patients, particularly, can not spend a portion of their time more pleasantly and profitably, than in the school room. For those of more cultivated minds, familiar lectures on scientific subjects, plentifully illustrated by figures and diagrams, may appropriately take the place of elementary instruction.

Dr. Brigham, of the Utica Asylum, and Dr. Earle of Bloomington, have taken some pains to employ their patients in this manner, and they represent the result to have been highly satisfactory. Indeed, nothing is to be despised which relieves the tedium of confinement without carrying the mental excitement it may occasion, beyond the healthy point."

Dr. Brigham, the editor of the *Journal of Insanity* and Superintendent of the Utica Asylum, in introducing the article of Dr. Conolly's relating his experiences at the French schools, says:

"We have three schools for the men, one of which has been managed for the past six months wholly by a patient, the others by a teacher, hired for the purpose.

We have one school for the women, which is conducted by a hired instructress.

The schools commence at ten in the morning and at two in the afternoon, and continue about one hour. They are opened and closed by singing a hymn by the pupils.

In all good order prevails, and many of the patients have made great proficiency. Several inclined to be discontented, have been made far less so by attending school, and a considerable number who were already in a demented state, or fast approaching it, have improved in mind, and become interested in learning."

After all these encomiums from such great men as Conolly, Ray, Earle, Brigham, and others whom I have not mentioned, it would seem mere supererogation to say more in behalf of schools for the insane. It is only when one stops and thinks how few such schools there now are that one asks why this change. On a little reflection I do not think the cause difficult to find.

Times have changed. These great men were able to give the schools their personal attention; and one can easily imagine that "Dr. Falret, sitting like a father among his children," to use the language of Dr. Conolly or Dr. Earle, whose mere presence was almost a benediction, would secure, with his great knowledge of his afflicted pupils, better results than a mere lay-teacher, be he never so faithful.

Hospitals have grown larger and the very men who should be best fitted to teach a school of such pupils, the physicians, are, from their numerous and onerous duties, least able to attend to it and they must necessarily relegate it to the care of others.

Times have changed. When these schools began they followed close upon the great awakening to the condition of the insane, to their neglect and the cruelty of their treatment, and it is not surprising if the pendulum of public opinion swung too far the other way; not that they could receive too much kindness, but rather that too great results were expected from that kindness.

Times have changed, and it would also seem as if the character of disease had changed too. It would seem as if more people were stricken with an incurable ailment from the first; that the percentage of recoveries is less than it was fifty years ago and that no method of treatment whether medical or moral, is as hopeful as then.

No doubt this particular method was carried to a degree not warranted by any just hope or expectation, for I read of some instances where apparently the whole number of patients in the asylums must have been under instruction, three or four hundred being assembled each evening for mental improvement.

The picture has been colored too highly, the hues are too rosy according to my experience, and some of the things which I find seem to me quite curious. Of these I may mention the fear of wearying or exciting the patients.

This led to exceedingly short sessions, one hour, and to accomplish anything much in such a short time too much haste, in my opinion, must have resulted, and little of good obtained.

Dr. Ray's ideas that the French, as a people, were more

amenable to such treatment than ours are and that men are better fitted to profit by it than women, are, I think, without foundation. In regard to the latter, I should say the direct reverse was the case.

But the gravest error in my estimation is the idea that the principal object of the school was the imparting of instruction and the measure of its success was the degree of knowledge obtained.

In my opinion the chief objects to be sought for in such a school are *self control* and *concentration of thought*.

We all know how intensely egotistical most of the insane are, how prone each one is to thrust himself forward to the exclusion of all others. If I can get such an one to hold himself in abeyance, to think and talk of something else than his woes, his griefs or joys, I shall have done him a greater favor than to teach him to do a sum in arithmetic.

We all know how difficult it is to secure any continuous thought on any subject, except the morbid, dominant thought.

If I can secure concentrated and continuous thought on some assigned, wholesome topic, I shall have done such an one a far greater service than to teach him to parse a sentence.

It is true he can neither do the sum nor parse the sentence without forgetting himself or fixing his mind, but it seems to me there is a very great difference which is regarded the chief object, the mere attaining or the way of attaining.

The former seems but the acquiring of that particular sum or that particular sentence, the latter the acquiring of the capacity and power to do an indefinite number of sums and to parse unlimited numbers of sentences, or what else may be required. It is true one can hardly learn to do one sum without learning something toward the doing of others. A comparatively weak man may make a great effort, on occasion, but it requires a trained athlete to sustain continuous exertion.

Such being the central thought and object, how can it best be obtained? I am often asked "How do you teach?" "What do you teach?"

It is comparatively easy to answer the latter, and the answering of it will, in a measure, give a clue to the former. First, let us glance at the conditions. Given, twenty or thirty or more persons in age from 15 to 75; some few scarcely able to read, others with

a fair to good degree of education; a washerwoman sitting beside a formerly bright and successful teacher; a man whose literary attainments are limited to a spelling book by the side of one learned in the law; men and women whose former lives were probably all they should not have been, mingled with those whose lives are like those of the saints; here a face heavy with unutterable woe, there one with a smirk of self-conceit of being possessed of unutterable goodness; there one with a fixed, intent look, listening to a voice no one else hears, then another gazing with open-eyed astonishment at faces and forms no one else sees; and get some idea of what one has to control, guide and help, if he can.

We go to the piano, a song is selected; it starts off, dull and lifeless, perhaps, another is chosen. Ah! that strikes the right chord, the faces brighten and it is sung with spirit; another follows, some one asks for a favorite song and it is sung; this goes on for ten to twenty minutes, according to the spirit and interest manifested. Frequently one with a good voice is asked to sing alone and the kindly interest shown by the others in the singer's success is highly gratifying. The singing over, the news of the day receives attention by reading from newspapers, each one being encouraged to seek out and bring items to be read before the school. Comments and remarks are asked for and usually freely offered. Sometimes a whole session is passed in this way, not a book being opened. In these discourses or "talks" only two topics are excluded, viz., politics and religion.

Facts relating to either are freely allowed, but no arguments. Such talks appear to interest all, the learned and the unlearned and all seem to have the keenest interest in all matters pertaining to Natural History. The story of some intelligent act of dog or horse, etc., is almost instantly capped by something in the personal experience of some one present. We do not depend much on text, the sources of quotations, historical parallels, etc., are all sought for to chain the attention and drive out morbid thought; but all, as far as possible, without hurry, restraint or irritation.

Such, I may say, is the usual course of the school. Our session of nearly two hours seems usually all too short, and the time for dismissal is frequently greeted with expressions of surprise. There are, unfortunately in this, as in all other schools, days that are called "off days," "blue Mondays," when there are clouded faces, short tempers, sharp retorts, but very seldom unkind or

vulgar words. Indeed, such words are rare for they are greeted by such an outburst of disapproval as not to encourage repetition. On such days the tendency of some to air their griefs and wrongs is especially strong, but we evade, check, or suppress it as best we can.

I am sometimes asked as to "how is all this received? What mental peculiarities do you perceive?" I must say in reply that I can see but little difference between them and other persons of equal intelligence, indeed, I am frequently surprised at the quickness with which many quite difficult subjects are grasped, and the keen and intelligent questions asked. This in regard to things new to them as well as old. The one thing most characteristic, and to me the most inexplicable, is the curious general forgetfulness.

A single illustration will give a better idea of it than any description.

At the time of Hallowe'en our talk naturally drifted to holidays and their observance. I read to them an account of the "simnel cake" in England and of its use particularly on "Mothering day" when all the young apprentices visited their mothers with little gifts and were treated in turn to this cake.

The next day when I asked what "Mothering day" was, no one could tell. There was a pause, then a volley of expressions of disgust and chagrin and remarks of "You told us all about that yesterday and we ought to be ashamed of ourselves to forget it. Why do we do it?"

One would suppose the very name would give a perfect clue, a key to the whole thing, but out of some twenty to twenty-five persons not one could recall it. But a few words of explanation brought out a flood of remembrances of the whole subject. That the whole school should forget so easy a thing seems to me very curious, especially as it has happened so often before, a wholesale forgetfulness, if one may use a commercial phrase to express it.

Should you ask, Do the pupils receive any benefit from the school? I would answer, in nearly every instance, yes, especially those who continue in attendance regularly for any length of time.

Of the benefits I will first mention improvement in deportment. It is true many are correct from the first, but where it is needed it surely comes. An instance will illustrate. A woman many years a patient joined the school last summer. After the first few

days the restraint of novelty wore off and she showed her real condition. I missed her one day and found her lying on a back seat with her skirt drawn up over her head, calmly disposed for a nap. I looked at her to-day, sitting clean and prim, a model of propriety, brighter in mind, clearer in eye, better company for herself and others, but still a very insane woman. Her former silly and sometimes impertinent questions have given way to those which are always respectful and frequently intelligent, her recitations show far greater steadiness of mind. Many times was her conduct so irritating that I was just on the point of asking for detention on the wards, but now she is frequently quite a help in the school.

When one is actively and pleasantly engaged, gloomy thoughts, temptations to anger, vindictive revilings can not be indulged in, and the hours those unfortunate ones are saved from no one can estimate. Sometimes the face I've seen bright and cheerful all the session, I've seen begin to darken even before the school door is shut. To a few such no session would be too long.

In some cases I can see no improvement, but even such I hope are preserved from deterioration. Opposed to this, there is steady and rapid improvement of some, alas, too few, convalescents.

It is pleasant to see the weakened mind growing stronger day by day, gaining confidence and freedom of action.

The appearance of content which both Dr. Conolly and Dr. Ray mention as so marked in the French schools I think is present usually in our school, except in the "blue Mondays," I have spoken of.

One case I must relate and then close. A lady of some thirty or more years of age of a refined and cultivated appearance attended the school something over a year ago. Her expression was one of the saddest I have ever seen. I tried to induce her to take part in the school, but without success. She could not read and could not spell, she said, although she was formerly a teacher. After repeated efforts I induced her to join in the spelling exercise. I examined it with much interest and to my great pleasure I found it correct.

The next morning she seemed almost as afraid to receive it as I was glad to give it to her. I handed it to her with a few words of praise and encouragement. Never saw I such a change in any

human face. It became illumed with hope, radiant with joy. It would seem as if she had fastened all her hope on that little piece of paper; it was now proof she had not lost everything, there was hope, good strong hope, for something in life for her yet. From that moment she seemed a changed woman and went steadily forward to recovery. Only two or three times did I see the old gloom coming back into her face, each time she asked to be excused from the class and set apart for a while but soon was able to conquer the rising doubts, and returned and resumed her place. In three or four weeks she seemed fully restored.

I may never have such an experience again, but I hope never to forget that radiant face. It paid well for many an hour of hard, apparently unsatisfactory work, and strengthened my faith in the value and efficacy of the moral treatment of the insane.

Clinical and Pathological Notes

*Report of a Case in which a Scarf-Pin was Swallowed and Passed per Rectum on the Seventh Day.** By EDGAR A. VANDER VEER, M. D.

The case which I wish to report to-night is so unusual, in a way, that I think it wise to put it on record. The patient, Mr. H. W., was referred to Dr. A. VanderVeer on February 7th, of this year, by Dr. Charles W. Snyder, of Great Barrington, Mass., with the following history:

On the morning of that day, while standing before a mirror, with the pin in his mouth, he gave a slight cough and sucked the pin into his throat. He ran immediately to Dr. Snyder's office, a few doors off, and on reaching there was unable to talk because of the pain from the pin which he felt in his pharynx. After a few minutes the pin seemed to disappear, and aside from a slight feeling of soreness in his throat he felt nothing of it. He started at once for Albany, reaching here about two o'clock in the afternoon, and in the absence of my father, I saw him soon after. Upon examining his throat nothing could be seen or felt and he complained of no trouble whatsoever; he could swallow without any difficulty, and that night he ate a fairly hearty dinner. The next

*Read before the Medical Society of the County of Albany, April 10, 1901.

morning Dr. Coopernail, of the Albany Hospital, took an X-ray photograph of his chest and abdominal cavity, but with negative results, no trace of the pin being found. After consultation with Dr. Root the patient was advised to enter the hospital for a few days, where he could be carefully watched, and in case any unfavorable symptoms developed could at once be operated upon. He was put upon a constipating diet, consisting mainly of boiled milk, toast and meat, in order to encrust the pin with feces, if possible, and was allowed to come and go as he pleased. His temperature and pulse were taken every four hours. The temperature did not rise above 99°F., but did go as low as 96°F. His pulse varied from sixty to eighty beats per minute. Upon a close physical examination it developed that he had a severe mitral lesion, which accounted for the variations in temperature and pulse. His bowels moved every day, but a careful examination failed to reveal the pin. By the seventh day the patient began to tire of his treatment and was making all his arrangements to go home, but was persuaded to remain a couple of days longer until he had taken a course of calomel.

He was ordered one-half grain doses of calomel every two hours until two grains had been taken, but two hours after he had taken the first dose he had a movement of the bowels and there, embedded in the feces, with just an edge sticking out, was the pin. Unfortunately, in order to handle it easier, he washed it off, which, while it improved the pin, did not improve the specimen.

In connection with this case I would like to repeat a few cases which have been reported in the medical journals.

SWALLOWING A SCARF-PIN

Arthur T. H. Trevor, in the London *Lancet* for September 26, 1885, reports a case of a child who swallowed a scarf-pin. On Sunday, September 13, 1885, he was called in at 9:30 A. M. to see M. J., *act.* 14 months, who had just swallowed a scarf-pin. The history of the case is as follows: An elder brother, about eight years of age, handed to his baby sister the pin, which she put into her mouth. The mother attempted to extract it with her finger and thumb, but it fell into the gullet and passed into the stomach. When the doctor arrived

the child was in no distress. He advised the parents to leave matters alone and to resist the temptation to give either purgatives or emetics. About six P. M. of the same day the scarf-pin was passed by the bowel, taking about ten hours to pass through the entire intestinal tract. The child was quite well and free from pain from first to last.

SWALLOWING A TOILET-PIN

Dr. Augustus A. Eshner of Philadelphia, reports the following case in the *Medical News* for October 22d, 1892:

B. J., a colored girl, whose age is recorded as 14, but who appeared to be quite three years older, applied at the Jefferson College Hospital on the evening of September 4th, stating that she had shortly before swallowed a toilet-pin, a duplicate of which she presented in evidence. As the foreign body seemed to be beyond reach she was advised to apply to the Out-Patient Department the following morning, and this she did shortly after noon. The girl stated that she felt slight pain in the epigastrium, but presented no other evidence of distress, beyond the fear of the evil consequences of the accident which had befallen her. She was, however, reassured, and carefully enjoined to live upon a diet consisting of milk and mashed potatoes, and to examine the stools in the hope of finding the foreign body. She returned in the course of two days stating that the bowels had been moved, but that the offending body had not been passed; the abdominal pain had changed and was now referred to the right hypochondrium. She was advised to persist in the treatment recommended, and a day later had the satisfaction of passing the foreign body which was surrounded by a layer of potato.

SWALLOWING GLASS

Dr. Geo. E. Brickett, in the *New York Medical Record* for January 12th, 1884, reports a case of a man who in eating some shelled clams broke the pepper-box in the bowl. After removing, as he thought, all the pieces of glass, he swallowed the clams by the spoonful and with one large mouthful he said he felt something hard going down his wind-pipe. This was on Saturday evening. Wednesday morning after stool, he felt something prick near the anus. He put his finger up

and felt something hard. He said, when he reached the doctor's office, that he could feel either a clam shell or a piece of pepper-box in his fundament. The doctor examined him and removed a round piece of glass three-quarters of an inch in diameter, with rough edges.

Dr. G. B. Goodall, of Greenwich, Eng., reports a case in the *London Lancet* for August 18th, 1894, of a child three years old who swallowed a pocket knife, just under three inches long; of the familiar shape; two blades; mother-of-pearl sides and brass tips. The knife was passed per rectum on the fourth day, and at no time did the child experience pain or even inconvenience.

Dr. Thomas B. Steele, of Cambridge, Mass., reports a case in the *Medical Record* of September 22d, 1894, of a child who swallowed a hat-pin six inches long. The pin formed an abscess, and was extracted from the cartilage of the 11th rib. There was evidently a connection with the stomach.

Dr. R. H. Phillimore, of Cookshire, Canada, reports a case in the *Medical Record* of December 8th, 1894, of a child who swallowed an English farthing. Nineteen days after the accident the patient ate of a quantity of grapes in addition to its liquid diet. This was followed by emesis and the coin, considerably worn, was suddenly expelled.

Correspondence

A UNIQUE ANNIVERSARY PUBLICATION

ALBANY, N. Y., *June 1, 1901.*

To the Editors of the ALBANY MEDICAL ANNALS:

The publishers of the *Wiener medicinische Wochenschrift* last year celebrated the semi-centenary of the establishment of their periodical in a unique manner. This was done by issuing an elaborate special number, entitled: "*Aphorismen: Gewidmet der Wiener medicinischen Wochenschrift aus Anlass Ihres 50 Jaehrigen Bestandes: Von Ihren Freunden, 1851-1900,*" made up of a collection of aphorisms written by the most eminent European physicians. These aphorisms deal with almost every phase of medical science. Epigram-

matical language is not always easily translated into foreign tongues, and the transposition into English may not in every case yield the full sentiment of the writer, but so many terse and striking ideas are expressed that a selection from this anniversary publication seems well worth reproduction. It is to be regretted that the signatures of our foreign colleagues cannot be appended, as in the originals, to bring us in nearer sympathy with their ideals. I take pleasure in submitting for the readers of the ANNALS a transcript of some of these aphorisms.

CLEMENT F. THEISEN.

APHORISMS.

Stone monuments are rarely erected in honor of the neurologist by his fellow men. But so many stones are thrown at him by his patients that he can build a pyramid for himself.

L. VON FRANKL-HOCHWART (Vienna).

Antisepsis is the triumph of modern surgery, but perhaps also the ruin of the old surgical skill, for to-day, under its protecting wing, children and fools operate unpunished.

ANTON V. FRISCH (Vienna).

Trying goes above studying.

P. GREITZNER (Tübingen).

The physician can receive no higher honor than the confidence of his colleagues, but only the knowledge that he has earned it can make him happy.

The future of medicine depends on Prophylaxis.

Cleanliness is the best prophylactic measure.

A kilogram of soap is a better prophylactic than ten kilograms of carbolic acid.

The final aim of the practice of medicine is to *keep* the organism healthy, not to *make* it healthy.

Infallibility in diagnosis is a sign of medical dilettanteism.

R. VON JAKSCH (Prag).

Surgery depends upon knowledge and skill. A development of the one with a neglect of the other will conduce to the injury of surgery. It is only by the uniform use of both that the whole will develop harmoniously into full bloom.

OTMAR V. ANGERER (Munich).

If the splitting up of medicine into constantly narrowing specialties continues as it has during the past few decades, scientific medicine will soon be a thing of the past. Even more dangerous is the complete division between the theoretical branches, anatomy and physiology on the one hand and the practical branches on the other. Medicine without anatomy and physiology is not knowledge.

KARL V. BARDELBEN (Jena).

The result proves the right.

Prof. E. BEHRING (Marburgh).

Upon the development of a scientific biology depends the future of medicine.

OTTO BERGMEISTER (Vienna).

The greatest progress in my opinion that modern medicine has made is that it has taught not only to diagnosticate and to cure diseases, but also to prevent them.

H. CHIARI (Prag).

A good physician must not only be a true and exact observer of nature, but also a deep student of mankind and a self-sacrificing friend of his fellowmen.

HERMAN EICHHORST (Zurich).

Without pathological anatomy practical medicine is a patch work.

HANS EPPINGER (Graz).

The diagnosis is and will remain the foundation of every rational proceeding of the physician. Examine again and again. For it is only uncertainty that leads to completeness of truth.

WILHELM ERB (Heidelberg).

Mistakes we make in scientific articles, which are called to our attention by others, we should honestly acknowledge, and should endeavor to keep free from a feeling of personal injury.

ISIDOR HERNHEISER (Prag).

Editorial

"Talking of education, 'People have now-a-days,' said he, 'got a strange opinion that everything should be taught by lectures. Now I cannot see that lectures can do so much good as reading the books from which the lectures are taken. I know nothing that can be best taught by lectures, except where experiments are to be shown. You may teach chymistry by lectures. You might teach making of shoes by lectures.'"

SAMUEL JOHNSON.

The Life of Samuel Johnson, LL. D.
By James Boswell, Esq.
Volume II, p. 5.

"If you want a man to be a tea-merchant, you don't tell him to read books about China or about tea, but you put him into a tea-merchant's office where he has the handling, the smelling and the tasting of tea. Without the sort of knowledge which can be gained only in this practical way, his exploits as a tea-merchant will soon come to a bankrupt termination."

HUXLEY.

The New
Laboratory of
the University
of Pennsylvania

As time goes on it becomes more and more apparent that the age of the didactic lecture is passing, and that the medical school which clings too closely to this silurian method of instruction will gradually be buried in the silt beneath the

stream of progress. In another twenty-five years the weary grind of sitting on hard benches listening to a rehash of textbooks will almost have disappeared from the curriculum.

The pace is of necessity set by the large schools in the large cities, and signs are not wanting to show that their constant effort tends toward the development of greater laboratory and greater clinical facilities. The design of the magnificent new laboratory building of the University of Pennsylvania lies before us as an example of the tendencies of modern methods of teaching. This building, which is to cost half a million dollars, is to accommodate the departments of physiology, pharmacy and pathology. Without going into minute details it may be said that the building is admirably adapted in design for the purpose for which it is intended. Being only two stories in height, and built around a large central court, ample lighting from all sides is secured; and the interior arrangements for class work, demonstrations and research are excellent. The University of Pennsylvania may well be proud of her new buildings and it is to be hoped that the necessary money and endowment for the construction of the rest of the group of medical buildings is already secured. By the encouragement of such work the profession and public are encouraging the education of practical physicians rather than those who at graduation have a merely academic knowledge of their art and must gain their practical knowledge by sad and often painful experience. They are furthermore fostering institutions, which by their discoveries do much toward the prevention and mitigation of disease. That the public at large as well as the progressive members of the profession realize this is indicated by recent gifts for scientific work, most notably by the recent offer of Mr. Rockefeller to endow a research laboratory. This is certainly needed in this country and with the financial backing of Mr. Rockefeller and the intelligent oversight which is guaranteed by the selection of the Scientific Committee it cannot fail in furthering scientific medical work in this country and in strengthening laboratory research.

State Medicine

Edited by Harry Seymour Pearse, M. D.

PUBLIC MEDICINE IN THE NEW YORK LEGISLATURE OF 1901

There is no surer indication of the growing influence of medicine—the term must necessarily be used here in a broad sense—upon our public welfare than the demand for the legislative enactment of measures pertaining to the physical and mental well-being of society. The legislative branch of the government is the medium through which the science of medicine exerts its influence for the sanitary improvement of municipalities, the protection of the public against communicable disease, the care of the pauper sick, the mentally deficient and the physically disabled. The activity of this branch increases in proportion to the increase in the range of application of medical science to the masses, and in proportion also to the growth of communities.

The number of bills presented this year greatly exceeded that of any previous year. In 1898, 139 bills were introduced and 30 passed both houses; in 1900, 268, including amended numbers, and this year 267, exclusive of amended numbers, which if counted would bring the number up to about 370. In four years the number has about doubled. This year, of the 267 original bills, 120 passed both houses; of this number 9 were vetoed by mayors of cities, 14 were vetoed by the Governor and 97 were signed by him and became laws. The conclusions to be drawn from these figures are that the number of medical bills is increasing yearly; that they are receiving more consideration by the law-makers than in the past; that the rapid growth of this department of medicine should stimulate the medical societies to use their influence in favor of or in opposition to proposed laws as the interests of the people dictate and that the legislative committees of the various societies should be made to recognize their growing responsibilities.

The ANNALS for February, March, April and May contained synopses of and discussions on the most important measures. It remains for us to give briefly their final disposition. The position of economy taken by the Executive had the effect in many instances of reducing the appropriations for the

maintenance of the charitable institutions under State control but not to the point of seriously embarrassing their work. The salary of the Commissioner in Lunacy was reduced from \$7,500 to \$5,000 yearly. The State Board of Health was abolished and a State Commission created with a Health Commissioner on an annual salary of \$3,500 to do the same work as the Secretary of the original Board at \$4,500. The effort to abolish the State Board of Charities and substitute a State Charity Commission on the same economic lines failed. The appropriation of \$120,000 for the erection and equipment of a State Hospital for the treatment of incipient tuberculosis was cut to \$100,000. The effort to have this hospital built on State land near Dannemora was defeated. The supplementary supply bill contained an item allowing \$20,000 to establish and equip a farm and laboratory for the manufacture and standardization of tetanus, streptococcus and diphtheria anti-toxine and for further investigations in serum therapy. This farm and laboratory will be in or near Albany and controlled by the State Health Commission. The noiseless but positive action of the State in making this appropriation is one of the best things that it has ever done to aid and further scientific research and it is to be sincerely hoped that the institution will be supported with the same spirit which characterized its establishment.

Dr. Henry, member of Assembly from New York City, should receive the thanks of the profession for his interest and activity in medical legislation. The failure of some of his own bills to pass was not due to inertia on his part. His bill to abolish coroners in New York City and substitute medical examiners was a reform measure in line with the abolition of coroner's juries in the State in 1898, and his bill providing for the proper ventilation of public buildings and school houses was also a reform measure. It is only a question of time when both of these bills will become laws. The attempt to control the practice of midwifery in New York City by examination and license ended as in previous years—in the pigeon-hole. The bill to confine the practice of hypnotism and mesmerism to physicians passed the Senate but failed in the Assembly. The "Lynn Type Bill" which regulated the size of type in newspapers and periodicals was

strongly opposed by commercial interests and defeated. From a purely scientific stand-point the principle of the bill was a good one. The bill which bound nurses to the same professional secrecy as physicians died in committee. The control of tuberculosis and glanders in animals was transferred from the State Health Commission to the Department of Agriculture. The Board of Regents was given discretionary power to divide the examinations in medicine, giving the student the opportunity to pass off some of his branches at the end of two years' study. Bills were introduced permitting two named individuals to practice medicine without a State license; one died in committee, the other slipped through in the rush of the last three days of the session, but was vetoed by the Governor. The discussions in the medical and lay press on the Osteopath and Christian Science bills have been inflictions which the profession could not escape. It is sufficient here to say that the Osteopaths failed in their attempts at legal recognition and that the efforts to control the practice of Christian Science by legal enactment also failed.

There was also a large number of bills providing for the water supply, sewage and garbage disposal of villages and cities. Many passed and were signed by the Governor. The Committee on Legislation of the State Medical Society watched closely all bills relating to medicine in any way, was active in opposing objectionable measures and aggressive in advancing good ones.

In Memoriam

HENRY TYLER PHILLIPS, M. D.

Dr. Henry T. Phillips (Albany Medical College, class of 1860) died at Cheshire, Mass., Friday, May 24, 1901, after a lingering illness from diabetes mellitus. Dr. Phillips was born in Lanesboro, Mass., August 8, 1833, and was the second son of Dr. Henry P. Phillips of that town. His father and both of his grandfathers were prominent Berkshire physicians and surgeons. The paternal grandfather, Dr. Liscum Phillips, died comparatively early in life. Dr. William

Hamilton Tyler, the maternal grandfather, practiced for many years in North Adams, Mass.

The subject of our sketch was educated at Drury Academy, North Adams, and at Claverack Seminary, Claverack, N. Y. He studied medicine with his father and grandfather Tyler; took one course of lectures at the Berkshire Medical Institute and two years of study at the Albany Medical College, graduating in the class of 1860. Dr. Phillips stood well as a student and served as valedictorian. After graduation he settled in Cheshire, Mass., where he had been in active practice for forty years. He leaves a widow, three daughters and one son.

Dr. Phillips was a member of the Baptist church, an earnest temperance advocate and a man of sterling qualities in every respect.

W. W. SCOFIELD ('82).

JOHN E. COMFORT, M. D.

Dr. John E. Comfort, one of the oldest and best known practitioners of the Borough of the Bronx, and a member of the County Medical Society, died at his late residence, No. 1315 Franklin avenue, New York City, on May 29, 1901. Dr. Comfort was born in St. Louis, Mo., October 6, 1837, graduated from the Albany Medical College in 1864, and on January 19, 1865, entered the United States Army as Assistant Surgeon of the 60th New York State Volunteers. He took part in Sherman's famous "March to the Sea," and later on in that year was honorably discharged by President Lincoln in his well-known "Muster-Out."

In 1867 Dr. Comfort came to New York, settling on Franklin avenue, which was then a portion of old Westchester county. In 1875 the doctor was appointed Sanitary Inspector on the Board of Health, and soon had one of the largest practices in this part of the country.

For over thirty years Doctor Comfort was a warden on the Vestry of St. Paul's Protestant Episcopal Church, on Washington avenue, Morrisania, and during his entire life he was best known for his many kindnesses to the poor. Among his patients he numbered the oldest and wealthiest families of the upper wards of the city.

After suffering a most painful illness for nearly ten years, death at last called him to his rest. As one writer has truly said: "He has gone to his reward, and we doubt not has heard the words of the Lord—'Well done, good and faithful servant, enter thou into the joys of the Lord.'"

ALONZO P. CASLER, M. D.

Dr. Alonzo P. Casler, a member of the class of 1880, of the Albany Medical College, died at St. Johnsville, N. Y., May 11, 1901, aged 56 years. Dr. Casler was born at Windom, N. Y., and received his preliminary education at the Clinton School in Clinton, from which he graduated in 1875. He began the study of medicine October 25, 1876, with Dr. H. H. Green of Paines Hollow, and continued it subsequently with Dr. J. M. Bigelow of Albany. After graduation he practiced for a short time at 73 Madison avenue, Albany, and then removed to Herkimer.

FRANCIS T. MCINTOSH, M. D.

Dr. Francis T. McIntosh (A. M. C. 1896), aged 43 years, died May 5, 1901, at his home, 2654 Fifth avenue, Troy, N. Y., after a protracted illness. He was born in Troy, where he received his preliminary education at La Salle institute, studied medicine in the Albany Medical College, graduating at the head of his class. Thereafter he took up the practice of medicine in his native city. He had served for several years as a district physician of the Troy Public Health Department, faithfully doing his duty despite the ravages of pulmonary tuberculosis. Dr. McIntosh was a man of great geniality, faultless habits, modest and retiring in disposition, but constantly active as a friend. He was absolutely unselfish, good-hearted to a faultless degree. Dearly beloved by a large clientele, and sorely missed from many charitable enterprises, his zeal for duty was greater than his physical endurance.

WILLIAM KIRK, Jr.

RICHARD VAN BEUSEKOM, JR., A. M., M. D.

In the death of Dr. Richard Van Beusekom, the class of 1897, one of the largest in the history of the Albany Medical

College, loses its first member. He was born in Holland in 1870 and died at Albany May 28, 1901. He received his early education at the district school of Guilderland, later entering the Albany Normal College, from which he graduated at an early age. He entered Union College in 1890, graduating with honors in 1894. He was elected to the Sigma Xi fraternity for his excellent standing and was also a member of the Phi Delta Theta society. In 1894 he entered the Albany Medical College, graduating in 1897. He was the valedictorian of the class. After graduation he settled at Coeymans, New York, where he established a large practice. On September 28, 1899, he was married to Miss Harriet E. Green, of Aquetuck, who survives him.

Having concluded to take a post-graduate course he sold out his practice at Coeymans to Dr. Reid of Indian Fields and went to New York Polyclinic to take up a special course on diseases of the throat. He contracted diphtheria and after his illness he was completely exhausted and returned to Coeymans for recuperation. Shortly afterward he had an attack of appendicitis and was removed to the Albany Hospital for an operation. His previous condition was such that he had but little strength to rally after the operation and he died from a complicating pneumonia. After the funeral services, held in the Reformed church at Coeymans, his remains were taken to Guilderland for burial.

Dr. Van Beusekom was quiet in his manner and remarkably energetic and devoted to his work and a man of promise in his profession.

H. JUDSON LIPES.

PROFESSOR MAURICE PERKINS.

The ANNALS sorrowfully announces the death of Professor Perkins, which occurred suddenly at his home at Union College on June 18, 1901. A memorial, which will include a sketch of his life and work, and of his long connection with the academic and medical departments of Union University, will be published in the next ANNALS.

Public Health

Edited by Joseph D. Craig, M. D.

DEPARTMENT OF HEALTH—CITY OF ALBANY, N. Y.

ABSTRACT OF VITAL STATISTICS, MAY, 1901

Deaths

Consumption.....	27	1 year and under.....	14
Typhoid fever.....	2	Albany City Hospital.....	13
Scarlet fever.....	1	St. Peter's Hospital.....	8
Diphtheria.....	1	Homoeopathic Hospital.....	5
Whooping cough.....	2	County House.....	2
Measles.....	2	Other institutions.....	2
Influenza.....	2		
Pneumonia.....	6	Total deaths.....	140
Broncho-pneumonia.....	3	Total deaths, May, 1900.....	152
Apoplexy.....	9	(a loss of 12)	
Bright's disease.....	15	Death rate May, 1901.....	15.84
Cancer.....	8	Death rate May, 1900.....	17.19
Accidents and violence.....	14	(a decrease of 1.35)	
70 years and over.....	15		

Births

1900.....	121	1901.....	89
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Marriages

1900.....	32	1901.....	21
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The number of births and marriages reported for May, 1901, is not to be considered as complete, as the returns are sometimes delayed several weeks.

There is now no small pox in the City of Albany, the last case having been discharged from the Small Pox Hospital, June 4th.

COMPARATIVE STATEMENT OF NUISANCES

May, 1900		May, 1901	
Vaults.....	24	Vaults.....	7
Filth.....	19	Filth.....	9
Drains.....	11	Drains.....	8
Chicken.....	2	Chicken.....	2

Total complaints in 1900, 93; in 1901, 49, a decrease of 44, or nearly 50 per cent.

CONTAGIOUS DISEASES REPORTED

<i>May, 1900</i>		<i>May, 1901</i>	
Typhoid fever.....	9	Typhoid fever.....	2
Scarlet fever.....	17	Scarlet fever.....	8
Diphtheria.....	37	Diphtheria.....	32
Chicken pox.....	2	Chicken pox.....	5
Measles.....	184	Measles.....	62
Whooping cough.....	0	Whooping cough.....	2
Consumption.....	2	Consumption.....	4
Total.....	251	Total.....	115

All diphtherias reported are very largely contained in one of the public institutions and it is gratifying to notice that the profession is showing a greater tendency to report cases of consumption.

DEPARTMENT OF PLUMBING, DRAINAGE AND VENTILATION

Special Report for May 1901

Inspections, 453; complaints, 79; permits, 167; plans, 22; violations, 1. Iron drains, 65; tile drains, 69; sinks, 89; water closets, 117; wash stands, 117. Total, 457.

SUPERVISION OF MILK

The importance of the supervision of the milk supply by the Departments of Health in all cities is emphasized again by the very satisfactory statistics recently published by the Department of Health of the City of Chicago. During a period of years from 1886 to 1896 before the supervision of the milk supply, the proportion of deaths under five years to total deaths was 46.91, while during a second period from 1894 to 1900, during which time there was a supervision of the milk supply, the proportion of deaths was 39.07, or a reduction of 16.9. A carefully prepared estimate renders it probable that the lives of 13,000 children have been saved in the City of Chicago from their supervision of the milk supply between the years 1894 and 1900.

SMALL POX AND VACCINATION

The Public Health Reports, Marine Hospital Service, June 7th, 1901, gives the total number of cases of small pox in the City of New York from December 16th, 1900, to June 1st, 1901, as 1,128 with 188 deaths.

In advance of a more detailed account of the small pox cases in Albany since November 1st, 1900, the profession may be interested in knowing that of all the cases of small pox outside of the Lathrop Memorial seventy per cent. had never been vaccinated, while twenty-six per cent. had been vaccinated only once in infancy. In one case, a second vaccination at twenty-two years of age, was followed by typical small pox in mild form at about fifty-five years of age. The employees of the Department of Health who were freely exposed, were each vaccinated at least three times and some as many as six times after the first of last November and in no case did any symptoms of small pox develop among them. In but one instance of the many occurring among children, were public school children implicated, in which there is compulsory vaccination. Most of the cases of small pox among children of school age occurred in connection with one of the private schools, and, as a rule, none of the children attending this school had ever been successfully vaccinated.

About 7,000 vaccinations have been made by the Department of Health during the last winter, and the postal cards returned from forty-one physicians give a total of 3,386 vaccinations. It is probable that from 12,000 to 15,000 vaccinations have been made in the City of Albany during the last seven months and in not a single instance has any serious or permanent result been reported. The full statistics will be given later when all the returns have been compiled.

Medical News

Edited by H. Judson Lipes, M. D.

ALBANY MEDICAL COLLEGE ALUMNI ASSOCIATION OF CENTRAL NEW YORK.
—On May 29th, at a banquet held at the Butterfield House in Utica, N. Y., an organization of the Alumni of the Albany Medical College of Central New York was effected. The following were elected officers: President, Dr. Charles J. Bacon, of Fulton, N. Y., class of '65; vice-presidents, Dr. E. D. Fuller, '78, of Utica; Dr. E. A. Wood, '75, of Syracuse; Dr. I. S. Edsall, '85, of Middleville; Dr. W. C. Faudrey, '85, of Lorraine; Dr. Charles Bernstein, '94, of Rome; Dr. A. C. Hagedorn, '92, of Gloversville; secretary, Dr. F. H. Brewer, '78, of Utica; treasurer, Dr. E. J. Cusack, '94, of Fulton. Dr. Thomas P. Scully, of Rome, is deserving of much credit in launching the venture and undertaking the initiatory corres-

pondence. The banquet was an informal affair. Personal reminiscences and the "old days at the college" were the order of the day. The next meeting is to be held the third week of September. The following alumni were present: Dr. Charles E. Smith, Whitesboro, '58; Hugh Sloan, Utica, '65; Charles J. Bacon, Fulton, '65; Charles B. Tefft, Utica, '64; H. K. Worden, West Moreland, '74; E. A. Wood, Syracuse, '75; D. P. Van Coult, Mohawk, '75; Earl D. Fuller, Utica, '78; F. H. Brewer, Utica, '78; E. J. Stephens, Utica, '81; J. H. Stephens, West Winfield, '83; J. M. Slingerland, Fayetteville, '83; I. S. Edsall, Middleville, '85; W. C. Faudrey, Lorraine, '85; Thomas P. Scully, Rome, '85; G. M. Fisher, Utica, '92; Charles Bernstein, Rome, '94; E. J. Cusack, Fulton, '94; W. K. Quackenbush, Trenton, '95; E. G. Stone, Utica, '96; C. J. Slocum, Utica, '97; H. O. Brust, Syracuse, '97; A. W. Bender, Utica, '99.

UNION COLLEGE COMMENCEMENT: 1901.—The commencement exercises were held this year and will hereafter be held on the *second* Wednesday in June instead of the fourth Wednesday as formerly. The commencement week began on Friday, June 7th, with the dedication of Silliman Hall (Y. M. C. A.) An address was made by John R. Mott, M. A., secretary of the World's Student Christian Federation. The following Sunday, President Raymond preached the baccalaureate sermon. On Monday, June 10th, the graduating class held their grove exercises under the Old Elm Tree in Jackson's Garden. In the evening the Extemporaneous Prize Debate and Junior and Sophomore Prize Oratory contests took place.

Tuesday, June 11th, the Phi Beta Kappa and Sigma Xi societies held their annual meeting. The board of trustees, the annual meeting of the Alumni Association, followed by the Alumni dinner in Memorial Hall, which was served by the ladies of Schenectady. In the evening the College Glee, Banjo and Mandolin clubs gave a concert in the Van Curler Opera House. On Wednesday, June 12th, the commencement exercises were held at the First Presbyterian church. The Chancellor's address was delivered by the Hon. Alton B. Parker, chief judge of the Court of Appeals. In the evening, after the President's reception, the senior class held their reception in Memorial Hall.

The next college year will begin on Thursday, September 19, 1901.

ALBANY COLLEGE OF PHARMACY; ANNOUNCEMENT, 1901-1902.—The catalogue of the College of Pharmacy and announcement for 1901-1902 has recently made its appearance. It is unusually neat and attractive and contains the full list of the alumni of the college.

ALBANY LAW SCHOOL'S SEMI-CENTENNIAL EXERCISES.—The fiftieth anniversary of the Albany Law School was celebrated May 29th with the graduation of the class of 1901. In the morning the alumni met in the courtroom of the Appellate Division, when an Alumni Association was formed. After luncheon, served at the Ten Eyck by the Albany County Bar Association, commemorative exercises were held at Odd Fellows' Hall. Hon. William W. Goodrich, presiding justice of the Appellate Division, second

department, delivered an address on "Fifty Years of Jurisprudence," while George Lawyer, of the Albany Bar, traced, in an historical address, the growth and development of the Law School. The Hon. J. Newton Fiero, dean of the school, outlined the present work and condition of the institution.

In the evening the regular commencement exercises were held at Odd Fellows' Hall. Addresses were made by William H. McElroy, of New York, and Rev. Andrew V. V. Raymond, president of Union University. A reception was given after the commencement exercises by Hon. Amasa J. Parker, president of the Law School.

THE ALBANY GUILD FOR THE CARE OF THE SICK POOR; STATISTICS FOR APRIL.—Number of new cases, 75. *Classification of cases*: Dispensary cases receiving home care, 8; dental, 2; other charity cases, 42; moderate income cases, 23. *Classification of diseases*: Medical, 28; surgical, 17; gynæcological, 28; dental, 2. This general classification includes 18 maternity cases and 9 cases of contagious diseases, diphtheria, erysipelas, scarlet fever and whooping cough. Transferred to hospitals, 3; died, 4. Cases were referred to the Guild by 4 of the health physicians, by 18 other physicians and by dentists. *Visits*: Number of visits with nursing treatment, 796; for professional supervision of convalescents, 338; total number of visits for April, 1,134. Four nurses on duty.

Special Obstetrical Department: Number of patients, 3. Source, Dr. Shaw, Dr. Stevenson and the Guild. Obstetrician, Dr. H. J. Lipes; number of calls, 15; assistant obstetrician, Dr. H. L. K. Shaw; number of calls, 11; students in attendance, 4; number of calls, 20; nurses in charge, 2; number of visits, 34; total number of visits on 3 patients, 80. One case curettage following abortion operation. One case forceps operation.

STATISTICS FOR MAY.—Number of new cases, 85. *Classification of Cases*: Dispensary cases receiving home care, 8; other charity cases, 56; moderate income patients, 2. *Classification of diseases*: Medical, 48; surgical, 9; gynæcological, 28. This general classification includes 11 maternity cases; 9 throat and nose; 3 skin; 2 eye and ear and 13 cases of contagious diseases. 3 patients died. Cases were reported to the Guild by the city physician, by four of the health physicians and by nineteen other physicians.

Special Obstetrical Department: One completed case in May; source, the Guild; applied in March; confined May 17; dismissed May 26; obstetrician in charge, Dr. H. Judson Lipes; number of visits, 5; nurses in charge, 2; number of visits, 12. One case now under preliminary treatment.

Visits of Nurses: Number of visits with nursing treatment, 886; for professional supervision of convalescents, 353; total number of visits in May, 1,239.

ALBANY HOMŒOPATHIC HOSPITAL.—This institution has become so crowded that better accommodations are a necessity. A building committee has been appointed which has examined several sites, but no selec-

tion has yet been made. It is the intention of the trustees of locating near the present situation, which is most convenient.

ROENTGEN SOCIETY OF THE UNITED STATES.—The second regular meeting of this society will be held in the University of Buffalo, Buffalo, N. Y., September 10-11, under the presidency of Dr. Heber Roberts, of St. Louis.

THE KINGS COUNTY MEDICAL SOCIETY LIBRARY.—The library of the Medical Society of the County of Kings, which was founded in 1845, has recently opened its new library on Bedford avenue, Brooklyn. This new building, which is absolutely fire-proof, equals any medical library building in the world in taste and completeness. An earnest appeal is made for contributions to a permanent library endowment fund and for gifts of medical books, etc.

PHENACETIN PATENT SUSTAINED.—The decision in the suit brought by the representative of the Farbenfabriken of Elberfeld company, which has been in progress for over three years, has just been handed down by Judge John B. McPherson, who sustained the patent. It is needless to add that it is the company's intention to hereafter strictly enforce their rights, not only for their own protection but for that of the medical profession at large. Physicians should be assured that the products prescribed are dispensed from the original cartons, for in this way only can they be fully protected against these worthless and often injurious imitations.

AMERICAN ACADEMY OF MEDICINE.—The twenty-sixth annual meeting of the American Academy of Medicine was held at St. Paul, Minn., June 1st and 3rd. It thus begins its first year and second quarter of a century under auspicious circumstances. The simple tabulation of statistics, however, does not give the true value of the meeting. The subjects under discussion consisted first of a symposium on Reciprocity in Medical Licensure, in which the trend of thought seemed to be away from pure reciprocity towards a conditional examination of those men moving from one State to another who had already acquired a license to practice by an examination before a State board. It was thought on the one hand that it would be almost impossible to so synchronize the movements of the various State boards of medical examiners as to make the examinations practically equivalent; and, on the other, that certain fitness to practice shown by those who had already been in practice should be accepted in lieu of an examination upon the primary subjects, while certain other tests should be applied which could easily be met by any one engaged in active practice if he were at all fit to receive a license.

The other symposium was entitled "Institutionalism," but papers rather treated of the abuses. They were all suggestive, and will form an interesting contribution to the subject. Special mention should be made of a paper by Dr. Hill, of Iowa, upon the present method of supervising institutions of that State, whereby a commission of three, giving their whole time and receiving a salary from the State, supervise the management of

all the institutions for the defectives. It removes the oversight of these institutions from politics and is working very well.

Another paper by Dr. H. Bert Ellis, of Los Angeles, describes a hospital in that city owned and controlled by medical men for profit, not philanthropy, which serves as a fair investment for the money, and is a great convenience to the profession in that city.

In addition to the papers connected with these symposia were several papers of general interest, Dr. Cattell, of Philadelphia, giving the details of the executive management of clinical laboratories in connection with hospitals; Dr. T. D. Davis, of Pittsburg, a valuable paper on the necessity of culture studies for medical students; a paper by Dr. P. Maxwell Foshay, of Cleveland, upon his new method of determining the value of professional services recently outlined in the *Cleveland Journal of Medicine*, and another by Dr. James A. Spalding, of Portland, Me., giving the personal experience of an ophthalmologist suffering from a sudden loss of vision and consulting first the optician and then the oculist for aid, showing the inefficiency of the former and the great help which the latter gave him.

The meeting concluded with the usual very enjoyable social session after electing Prof. V. C. Vaughn, of the University of Michigan, president.

PERSONAL.—Dr. JAMES F. ROONEY (A. M. C., 1898), has removed from Valatie, N. Y., to No. 72 Philip street Albany, N. Y.

—Dr. ARTHUR BEDELL (A. M. C., 1901), of Watervliet, has received the appointment of house physician at the Ellis hospital at Schenectady.

—Dr. CHRISTIAN G. HACKER (A. M. C., 1899), has removed from Albany to Gloversville, N. Y.

Book Reviews

International Clinics. A Quarterly of Clinical Lectures and Especially Prepared Articles on Medicine, Neurology, Surgery, Therapeutics, Obstetrics, Pædiatrics, Pathology, Dermatology, Diseases of the Eye, Ear, Nose and Throat, and Other Topics of Interest to Students and Practitioners. By Leading Members of the Medical Profession Throughout the World. Edited by HENRY W. CATTELL, A. M., M. D., Philadelphia, U. S. A., with the Collaboration of JOHN B. MURPHY, M. D., of Chicago; ALEXANDER D. BLACKADER, M. D., of Montreal; H. C. WOOD, M. D., of Philadelphia; T. M. ROTCH, M. D., of Boston; E. LANDOLT, M. D., of Paris; THOMAS G. MORTON, M. D., and CHARLES H. REED, M. D., of Philadelphia; J. W. BALLANTYNE, M. D., of Edinburgh, and JOHN HAROLD, M. D., of London, with Regular Correspondents in Montreal, London, Paris, Leipsic and Vienna. Volume IV. Tenth Series, 1901. Philadelphia: J. B. Lippincott Company. 1901.

In this volume five articles are given to the continuation of the "Symposium on Genito-Urinary Diseases" begun in the third volume. In one of these Dr. Felix Guyon strongly recommends the use of the fixed catheter in urinary infection, and claims that the results are better than

those obtained by supra-pubic drainage. In an article on "The Use of Mercury in the Systemic Treatment of Syphilis," Dr. A. H. Ohmann-Dumesnil describes the different methods of administering mercury and emphasizes the fact that it cannot be replaced by anything else in the treatment of syphilis, as it is the only drug which, given alone, will cure the disease.

Professor B. Grassi contributes a paper on "Mosquitoes and the Prophylaxis of Malaria," in which he gives a concise account of the life history of the malarial parasite. He believes that the number of anopheles mosquitoes can be much reduced in malarial regions, though it may not be possible to destroy them altogether. It is noted that it is important to keep persons who have malaria from infecting mosquitoes in healthy districts, as well as to protect healthy people from being bitten when the disease exists. In "Recent Advances in Diagnosis," Dr. James J. Walsh describes the characteristic cellular changes in effusions from the pleurae and other serous membranes which throw light on their etiology. He also discusses the value of serum diagnosis of tuberculosis and cyroscopy, the determination of the freezing point of urine. Abstract reports of some very interesting operations, by Dr. John B. Deaver, are given, including one for gluteal aneurism, in which the internal iliac and profunda femoris arteries were ligated, and the aneurism was excised four weeks later. In an article on "The Role of the Blastomycetes or Ferments in the Etiology of Cancer," Professor Roncali concludes that the blastomycetes found by San Felice and himself are morphologically the same as the so-called coccidia described by earlier observers, and that they are of extraneous origin. He also says that they occur only in malignant neoplasms and that, when obtained in pus cultures and inoculated into animals, they reproduce themselves and cause lesions of a neoplastic and not an inflammatory character. Dr. Henry W. Cattell contributes a monograph of one hundred and seven pages on "The Etiology and Morbid Anatomy of Various Diseases." A definition of the most common morbid affections with their etiology and pathology is given in concise form for the special benefit of those about to take examinations in medicine and pathology.

R. G. C.

The Treatment of Fractures. By W. L. ESTES, A. M., M. D. Director and Physician and Surgeon in Chief of St. Luke's Hospital, South Bethlehem, Pa. International Journal of Surgery Co., New York. 1900.

In this volume of 216 pages and 61 illustrations, the author presents his own personal ideas as to the treatment of fractures. As he plainly states in the preface, his intention is to discuss only the treatment, and a long experience in a hospital where a great variety of fractures are seen certainly qualifies him to do this.

Little attention is paid to the literature upon the subject or to the relative merits of different methods of treatment. In each instance the chief emphasis is laid upon that method of treatment which, in the author's experience, has proven the most satisfactory.

A brief chapter is devoted to the "first aid," the "setting" of a frac-

ture, a short discussion of the subject of splints, and massage and passive motion after a fracture.

The treatment of fractures of the bones of the cranium, face and trunk is next considered, the technique of and the indications for laminectomy being discussed in connection with fractures of the vertebræ.

The treatment of fractures of the clavicle and upper extremity receives considerable attention.

For fractures about the elbow joint the author advises the right angle position rather than the acutely flexed position advocated by many surgeons.

Fractures of the pelvis introduce the subject of the treatment of wounds of the bladder and urethra, which often accompany these fractures.

In discussing fractures of the neck of the femur, the author advances the somewhat unusual idea that the comfort and well-being of certain aged individuals is conserved by a failure to obtain union between the fragments, because of the rheumatoid pains and discomfort which in certain instances follow the healing of such a fracture.

In discussing the treatment of fractures of the patella, the author advises against the universal employment of operative measures, and in his experience mechanical treatment has usually been followed by a good result.

In certain oblique fractures of the tibia, in which the fragments are retained in place with great difficulty, the author advises open incision and fixation with wire, ivory pegs or a nickel steel plate devised by himself.

The volume closes with brief chapters devoted to the treatment of compound and complicated fractures of the head and extremities, in which technique, etc., are discussed. No mention, however, is made of the use of rubber gloves as an important factor in aseptic technique.

Especially to be commended are the simplicity and practicability of the methods of treatment advocated in this volume, complicated apparatus being especially avoided. No method of treatment is advised which has not, in the author's experience, given satisfactory results.

For the general practitioner, as well as for every one who may be called upon to treat fractures, this volume contains much valuable information, and is infinitely more satisfactory than many more voluminous works upon the subject which contain more of theory and less of fact.

A. W. E.

Infant-feeding in Health and Disease. By LOUIS FISCHER, M. D., Attending Physician to the Children's Service of the New York German Poliklinik; Bacteriologist to St. Mark's Hospital; Professor of Diseases of Children in the New York School of Clinical Medicine; Attending Physician to the Children's Department of the West Side German Dispensary. Containing 52 Illustrations, with 16 Charts and Tables, Mostly Original. 368 Pages. Philadelphia: F. A. Davis Company. 1901. Price, \$1.50, net.

The first few chapters in this book are devoted to a brief description of the anatomy and physiology of the infant's alimentary tract and the stomach capacity. The various constituents of milk are then dwelt upon and the composition and variations of breast milk. Breast feeding, mixed feeding, wet nursing and weaning are taken up in turn. The peculiarities and differences in cow's milk and the various methods of modification are discussed in such a way that the author's prejudices can easily be discerned. Dr. Fischer makes no reference to the use of whey in modifying milk, as is being done with success by Ashby, Monti and many pediatricists in this country. The common and very satisfactory method of diluting with barley water, as recommended by Jacobi, is not given the attention it deserves. The chapters on sterilization and pasteurization are valuable, but no mention is made of the method of low pasteurization (140° F.) advocated by some of the German authorities. He calls attention to the fact, now generally recognized, that if more care were given to stable hygiene, less sterilization and less pasteurization would be necessary. His description of the plan of certified milk is much too brief. The subject of incubator feeding is well treated, and contains a copious abstract from Griffith. The chapter on infant foods describes some of the more commonly known foods, and gives analyses when prepared for the nursing bottle, according to directions, and compares these with breast milk much to the detriment of the alleged foods. To judge from the apparent success—financial—of the fast increasing number of proprietary infant foods, there must be a vast amount of ignorance on the part of the medical profession as to their exact composition and clinical value. The author is not a convert to laboratory milk, and devotes some space to his experience with it, and also that of Drs. Starr and Jacobi, but does not give its supporters a hearing. He admits the idea is plausible in theory, but claims it cannot be applied in practice. Condensed milk is probably the infant food most in use among the poor, and no doubt will continue to be, but the author requires only two pages in which to discuss it, because, perhaps, he "cannot approve this method at all." He devotes twenty-two pages, however, to the consideration of Gærtner's "Mother Milk," which is sold in tin cans and sterilized, and, in our opinion, is open to more objections than condensed milk, yet the author strongly endorses it. Chapters are devoted to colic, constipation, dentition, rachitis and athrepsia, but there is no adequate description of that not uncommon disorder of nutrition, scorbutus. The chapter headed "Dietary" is disappointing, as one would expect to find appropriate diet lists for the use of very young children, but it contains a number of recipes, some of which are most inappropriate, such as two for making coffee, egg-nog made with a dessertspoonful of brandy, and others. The book closes with a list of books consulted, and a rather poor index. The author evidently did not consult Rotch's text-book on Pediatrics, which contains a most exhaustive division on infant feeding. There are several full-page plates and the photographs of rachitis and marantic infants are typical and excellent.

The arrangement of the book is unfortunate, and the topics are not

grouped in a way to afford easy reference or consecutive reading; for instance, chapter thirty-two is devoted to forced feeding and nasal feeding, while the forty-third chapter also treats of nasal feeding and describes the technique. Such instances could be multiplied.

There is a demand for good books on Infant Feeding, and, in spite of an evident haste in compilation, the work before us contains many features to be commended. The common sense and large practical experience of the author permeate the book and enhance its value.

H. L. K. S.

Panama and the Sierras. A Doctor's Wander Days. By G. FRANK LYDSTON, M.D., Chicago. The Riverton Press. Price \$1.75.

The author, a well-known Chicago surgeon, made his debut a few years ago in general literature by writing "The Tales of a Talkative Doctor." The present work is the result of a journey from New York across the isthmus to California undertaken for recuperation after an attack of appendicitis. There is no attempt to make this volume the ordinary book of travel, it is simply an interesting grouping of the impressions and observations of a man who shows that he understands human nature and sees at a glance the unusual and picturesque.

His description of Panama is interesting and his story of the waste, prodigality and criminality evident in the construction of the canal clearly shows that the end of that bubble was inevitable.

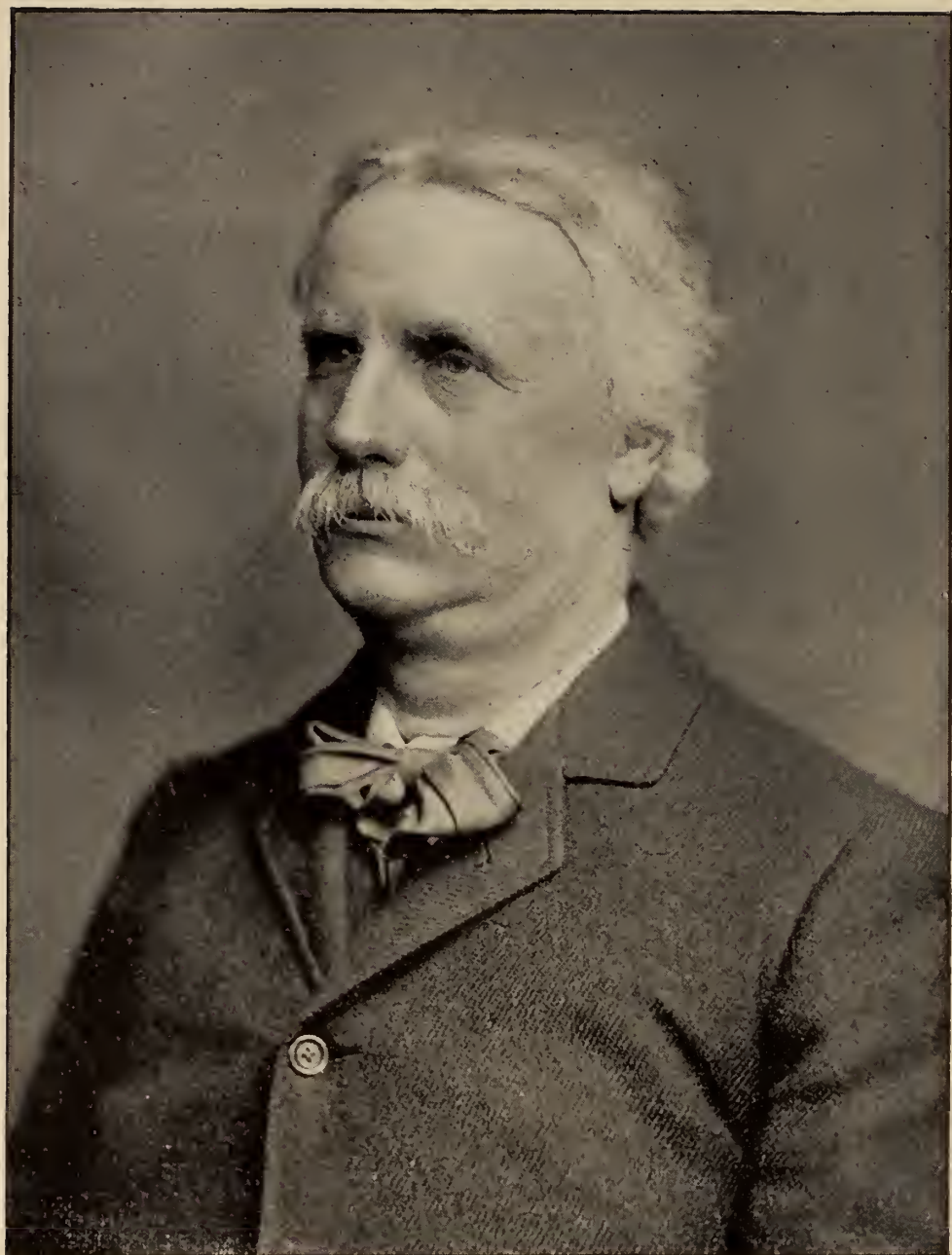
The concluding chapters describe California, and the author, who was born in California and passed his youth in a mining camp, makes many interesting comparisons of the old with the new, especially in the mining regions. He cleverly describes many of the sturdy argonauts who were his boyhood friends and whose type is now extinct.

The volume is dedicated with sympathy to "the stay at homes," and the last pages humorously describe the frantic efforts of this surgeon to save his poor appendix from the machinations of his fellow surgeons.

Transactions of the American Dermatological Association.

This is a report of the proceedings and the matter presented at the 24th meeting of this association in 1900, held in connection with the 5th triennial session of the Congress of American Physicians and Surgeons, at Washington. It contains papers and discussions which are of very considerable interest to the medical profession, naturally most to those especially interested in dermatology; of pure general concern is a discussion on Leprosy, following a paper by Dr. P. A. Morrow, and on Malignant Diseases of the Skin, with papers by Drs. Bronson, Hurtzell and Shepherd, with others by other authors in the connection. There are numerous illustrations accompanying the text. The volume marks an annual era in the progress of this department of medicine.

F. C. C.



Manner Perkins

ALBANY MEDICAL ANNALS

BIOGRAPHICAL SKETCH OF THE LATE PROFESSOR MAURICE PERKINS, M. D., OF SCHE- NECTADY, N. Y.

There are some lives that seem to us so full and strong that we can scarcely think of them as ceasing to exist, and when death comes to such the blow is heavy and the sense of loss is deep, because the shock is great that life, so all-abounding and exuberant, should cease. And so it was that a wide circle of friends heard with astonishment and unfeigned sorrow a few days since that Professor Perkins was no more. That the kindly voice should be hushed; the willing hands, ever ready to extend favors, be stilled; and the record of a life, helpful, enthusiastic and inspiring, so suddenly be closed, seemed all but impossible, and brought dismay and grief to many. It is too early now, and the sense of loss too recent, to gather up with systematic care the facts of such a life, and to arrange them adequately and in a fitting form, but many friends whom this memorial may reach will look for some record of this life just ended, and to such is this brief sketch offered in the hope that it may serve a present purpose and aid in voicing the sorrow which all feel who knew and loved our friend.

Dr. Maurice Perkins was born in New London, Conn., on the 14th of March, 1836, and came of good New England ancestry. He was the son of Thomas Shaw Perkins, a successful lawyer of New London, and Marian, daughter of Governor Roger Griswold, of Lyme, who had been Judge of the Supreme Court, Lieutenant-Governor, and afterwards Governor of Connecticut, and whose father, Matthew Griswold, had been Governor of the state before him. Through the Griswolds he was descended from the

Hydes, one of the oldest families in New England and one distinguished by the many men of high character and great usefulness, tracing their lineage from this ancestry, who have played an important part in American affairs. His father had graduated from Yale and intended that his son should follow in his steps, but while pursuing his preparatory studies in Easthampton, Mass., his health gave way and, under medical advice, he abandoned his course and took an extended sea voyage. Returning from this trip, benefitted in health, he resumed his studies in New York city, spending three years at the College of Physicians and Surgeons there. His tastes lay in the direction of the physical sciences and he early evinced both natural aptitude and decided liking for the science of chemistry. Desiring to obtain the best instruction, he went to Europe in 1859 and studied at Heidelberg, Göttingen and Tübingen, under such masters as Bunsen, Kirchhoff and Wöhler, remaining abroad, and most of the time in Germany, for several years. On his return he was appointed Assistant Professor of Chemistry at the College of Physicians and Surgeons in New York, serving as such during the years 1862 and 1863. From New York he went to Harvard, where for two years he was assistant to Professor Wolcott Gibbs in the Lawrence Scientific School, receiving from Harvard in 1865 the degree of A. M. The same year he was called to the chair of analytical chemistry in Union College, and in this place he remained until the close of his life, the third professor in order of appointment upon both college and university faculty. In 1870 he was appointed Professor of Chemistry and Toxicology in the Albany Medical College and when, in 1876, the faculty was re-organized and the chair of chemistry was divided, he was made Professor of Chemical Philosophy and Organic Chemistry, and the duties of this position also he continued to discharge so long as he lived, and from the Albany Medical College received, in 1870, the honorary degree of Doctor of Medicine.

As a teacher Dr. Perkins was eminently successful. By winning the affection and securing the regard and confidence of his pupils he easily enlisted their attention, and, being stimulated by his enthusiasm and encouraged by his kindly interest, they made rapid progress under his guidance. Among them he was universally popular. His students confided in him, trusted and respected him. His laboratory was a place in which they loved to

gather, to discuss with him their work, ask his counsel, and unfold to him their plans, and here they were ever sure of kindly reception and disinterested advice. His personality was so winning and his manner so easy and confidential that the most diffident student was quickly at ease in his presence, and his genial nature, ready wit and quick repartee made all his conversation enlivening and his pleasantries irresistible. His keen sense of humor prevented his taking too serious a view of the daily incidents of life and largely accounted for the refreshing influence which he exerted so universally upon all with whom he came into even casual contact. He looked for the best in everybody and was quick to commend good deeds and noble actions, and while he was not slow to recognize foibles and inconsistencies, if he exposed them it was with playful ridicule and never with malice or vehement denunciation. Such geniality and *bonhomie* as he possessed is attractive to all, but especially to the young, themselves enthusiastic and light-hearted, and so it was not strange that his classes as they went out from his tutelage carried with them a deep feeling of affectionate regard and sincere attachment.

As a chemist Professor Perkins' reputation was widely extended and his services were frequently sought. He received his professional education at a time when specialties were little cultivated and when chemists were expected to hold themselves in readiness to undertake any and all kinds of work, and so, throughout his long professional life, he carried on work in all departments of analytical chemistry, inorganic and organic, gas analysis, metallurgical chemistry, soils and fertilizers, milk and dairy products and other foods, potable and mineral waters, dye-stuffs and explosives, drugs and medicinal preparations. He showed no disposition to work in a groove, but was ever on the lookout for new methods and improvements on old processes, and as he was a quick reader, possessed a retentive memory, and was always ready to test any method that promised to be helpful, he easily kept abreast of younger men, carrying into his mature life and later years the energy and self-confidence of youth. He was of too versatile a mind and too impatient of results to indulge in protracted research work, preferring to essay many things rather than delve laboriously into any one, but he was imbued with the true scientific spirit, and all the work he did was honest work, well done and never slighted. His duties left him little time for

writing but his lecture notes were freshly and carefully prepared each year and whatever he wrote was concisely expressed and clearly stated. Witness his address delivered at the opening of the fall session of the Albany Medical College, September 5, 1871, which was published by the class and ranks among the most eloquent and suggestive lectures of its kind ever delivered in the institution. His analysis of human parotid saliva made while assistant at the College of Physicians and Surgeons has appeared in the text of every edition of Dalton's Treatise on Human Physiology subsequently published, and no analysis of this secretion so complete had ever previously been made. In 1867 he prepared and published for the use of his laboratory classes "An Elementary Manual of Qualitative Chemical Analysis," a small work, based upon Fresenius' hand-book, but possessing certain original features, which was very favorably received and largely used in other institutions. This book, expanded by others into a larger manual and under a different name, is still in common use and a favorite with many teachers. His "Metric System of Weights and Measures," was published in tabulated form for the use of the students of the Albany Medical College in 1878 and proved very helpful to them and was widely circulated. In 1878 he read before the Medical Society of the State of New York a paper on the "Estimation of Urea," in which he described an ingenious application of the hypobromite method of Kopp, and the process recommended by him in this paper has, in one form or another, come into general use among physicians. This paper appeared in the Transactions of the society for 1878, at p. 142, and has been issued as a reprint and had a wide circulation.

As a toxicological expert Dr. Perkins rendered valuable services in many important cases. Upon the stand he was not easily discomposed, nor did he unnecessarily antagonize the interests of the opposition, and as he never failed to show proper courtesy to judge, jury and counsel, he made a good witness and served as such in not less than forty medico-legal cases. He held at various times many positions of honor and trust. For several years he was a member of the Schenectady Board of Health, and from 1887 to 1892 was one of the State Health Commissioners upon the State Board of Health by appointment of the Governor, and in 1892 he represented the Board at the International Convention of Health Boards held at the City of Mexico. He was elected to

membership in the American Association for the Advancement of Science in 1866, and was a fellow of the association from 1875 to 1884. In 1875 he was elected a corresponding member of the Albany Institute. He was a member of the Medical Society of the County of Schenectady from 1872, and served as delegate from that society to the State Medical Society from 1881 to 1884. He was, at various times, member of the American Academy of Arts and Sciences; the Connecticut Academy of Arts and Sciences; the Natural History Society of New York; the Albany Camera Club; the American Chemical Society, and the New York Section of the Society of Chemical Industry of England. He was a member of Phi Beta Kappa and Sigma Xi.

Dr. Perkins had traveled extensively and had stored up a rich fund of experiences gained during his journeyings and foreign residence. He had studied in Germany and France; traveled in the far East; sailed the Pacific, the Indian Ocean and China Sea, and had passed through many thrilling experiences and some hair-breadth escapes, which he occasionally related for the entertainment of his friends. He was a good traveler, spoke several languages, was at home anywhere, and being naturally of an observing disposition he profited much by what he saw. He cared little for externals, nothing for display and attached no importance to fast ships or fine surroundings if so be he got to his destination and attended to the matters in hand. And this temper of mind marked all his acts. He liked the elegancies of life and its luxuries and conveniences well enough but these things were not in any sense essential to his comfort or happiness. He was easily satisfied, and seldom unsatisfied or dissatisfied with his surroundings and fortunes. He thought too highly of himself to envy anybody else or covet their possessions. He made his lot in life: and while he liked people, and enjoyed society, he was by no means dependent upon it for his pleasures, but found them everywhere at hand, because he took delight in little things, looked cheerfully upon life and had a kindly feeling toward all mankind.

Dr. Perkins married a daughter of the late Dr. Potts, a distinguished clergyman, and his family consisted of two daughters and a son, all of whom survive him. His daughter Alice resides in New York city, and Rose Married Dr. Edward Everett Hale, Jr., professor in Union College, and to their son has been given his grandfather's name. His son, Dr.

Roger Griswold Perkins is located in Cleveland. His residence in Schenectady fronted on the beautiful college campus and formed part of one of the old college buildings. It was old-fashioned, but quaint and very comfortable, and he loved it. Here was his study, and here were his books and amid these pleasant and quiet surroundings, with his family and intimate friends, his happiest hours were passed.

This sketch would be incomplete without some reference to Dr. Perkins' personal appearance and characteristics. The portrait which accompanies it is a good reproduction of a photograph taken in 1899 and considered very satisfactory by his friends. He was a singularly handsome man of distinguished appearance, rather careless and unconventional in his dress, but of a manner and bearing that attracted attention anywhere. In conversation he was animated and fluent; a good story teller and quick to see the humorous side of any situation. He was of a bright and sunny disposition, sanguine and affectionate in temperament, looking for the best in every body and every thing and thinking no evil. He was quick to see into the heart of things and not easily deceived by outward shows or mere pretenses, and although both sympathetic and unsuspicious by nature, he was quick to detect hypocrisy, affectation and insincerity, and to expose and ridicule them if need there was. It has been said that he was fond of people, and people liked him, for he was democratic in his tastes and friendly with every one he met, greeting all acquaintances with a pleasant word or cordial hand-grasp, and ready at any time for a chat with a friend, or a bit of helpful counsel or suggestive hint, tersely or quaintly expressed perhaps, for some younger man. His conversation was embellished with many odd words, droll expressions and proverbial phrases, and he was the life of any gathering and a center of observation wherever he went. His students admired him; his colleagues loved him; and his seniors esteemed him. His friends were many,—of enemies he had none.

Dr. Perkins' last illness was of short duration. During the fall he had complained occasionally of shortness of breath, but he had been in good spirits and seemingly in his usual health. In May a physical examination revealed an abnormal action of the heart, and it was found later that other organs were involved. He kept up and at his work, but his friends noted a change in his appearance, and during Commencement week, the week preceding his

death, he showed little disposition to take an active part in any of the exercises, although greeting those friends whom he met with his accustomed cordiality. On Monday afternoon, June 17, he was suddenly siezed with an attack of violent pain in the region of the heart. His medical advisers were summoned and administered remedies that alleviated his distress after a time, but the next morning at half past one, June 18, 1901, the end came suddenly. His wife was at his side, but before his physician, who was in a lower room, could reach him he had passed away.

The funeral services were held from the college chapel on Thursday afternoon, June 20, in the presence of his family, the faculty of the college, representatives of the various departments of the University, many students, and a large concourse of friends. They were conducted by President Raymond, whose exquisitely worded eulogy was inspired by personal affection and bespoke a deep grief. The Rev. Dr. George Alexander, of New York, and Dr. Stevenson, pastor of the First Presbyterian Church in Schenectady, assisted in the services and at their close those present followed the body to the college plot in Vale Cemetery, near at hand, in which it was laid to rest amidst many and heartfelt expressions of unaffected grief.

And so has passed from earth one who did much that was good as he had opportunity, and who will be long remembered for his kindly ways and gentle deeds, his cheering helpfulness, his brilliant mind and genial disposition. But the better part of his character,

“That best portion of a good man’s life,
His little, nameless, unremembered acts
Of kindness and of love,”

can never be set down in words. These constitute a legacy bequeathed, though with no formal testament, to friends, but valued all the more because they form an inheritance so personal that its items can neither be inventoried by the owner nor bestowed by him upon another. Such possessions are intangible, but they are very real: invisible, but invaluable.

“One who never turned his back but marched breast forward,
Never doubted clouds would break,
Never dreamed, though right were worsted, wrong would triumph,
Held we fall to rise, are baffled to fight better,
Sleep to wake.”

WILLIS G. TUCKER.

Original Communications

THE BACTERIOLOGY OF LOBULAR PNEUMONIA ESPECIALLY IN ADULTS.*

By GEORGE BLUMER, M. D.,

Director of the Bender Hygienic Laboratory, Albany, N. Y.

The bacteriology of the lobular form of pneumonia has been mainly worked up in its relation to the diseases of childhood, and especial attention has been given to lobular pneumonia following diphtheria and the acute exanthemata. The question of the bacteriology of lobular pneumonia in adults has been the subject of relatively few researches. In looking over a series of 350 records of autopsies performed in Albany, most of them in connection with institutions having an acute service, but some of them private autopsies, the frequency with which lobular pneumonia has been observed appears to me somewhat unusual. Of the 350 autopsies lobular pneumonia was present in 114, a percentage of about 32.5. In the same group of cases were but fifteen cases of acute lobar pneumonia, a percentage of 4.2. In seventy-one of the cases showing lobular pneumonia cultures had been made not only from the lungs but also from the organs in general. In the other cases cultures were not made, either because the bodies had been embalmed or because distinct evidences of post-mortem change were present. It is my object in this paper to take up the subject of lobular pneumonia, first from the standpoint of pulmonary bacteriology, and next as regards the relation of pulmonary to general bacteriology.

In reviewing the work already done on this subject, only those articles which deal with it in a general way and cover a series of unselected cases are comparable to the series here reported. Articles dealing with single cases, and with forms of lobular pneumonia due to specific organisms are, as a rule, ignored. In his classical article on the etiology of acute pulmonary and pleural inflammations, Weichselbaum studied twenty-five cases of lobular

*Read before the New York Pathological Society, March 13, 1901.

NOTE.—The term lobular pneumonia is used in the sense of a circumscribed pneumonia affecting collections of pulmonary lobules and includes broncho-pneumonia. Whilst certain pathologists distinguish between broncho-pneumonia and lobular pneumonia, no such distinction has been made in bacteriological articles up to the present. It is therefore not made in this article.

pneumonia in the adult. Twenty-four (24) of these were simple infections due to one organism. In these twenty-four the pneumococcus was found twelve times, the streptococcus seven times, the bacillus of Friedländer twice and the staphylococci three times. The one mixed infection was due to the pneumococcus and the staphylococcus aureus.

Four adult cases studied by Banti showed the pneumococcus in one, pneumococcus and staphylococcus aureus in one, the streptococcus and staphylococcus in one and the bacillus of Friedländer in one.

Netter, whose work on the subject is very extensive, found single infections in thirty-nine out of fifty-three adult cases and mixed infections in the remaining fourteen. Only four organisms were found in the the thirty-nine cases of single infection, the pneumococcus fifteen times, the streptococcus twelve times, the bacillus of Friedländer nine times and the staphylococcus aureus three times. Of the fourteen mixed infections the pneumococcus was found in twelve, five times with the staphylococci, three times with streptococci, twice with Friedländer's bacillus and twice with both the staphylococcus and the streptococcus. Of the two remaining cases one showed strepto and staphylococci, the other Friedländer's bacillus and staphylococci.

It is to be observed that in all of the reports so far mentioned the presence of the colon bacillus is not once noted. Whether records of this organism were purposely omitted is not stated.

Wright and Stokes in their bacteriological investigations of autopsies studied sixteen cases of lobular pneumonia. Of these fifteen were single infections, eight being due to the pneumococcus, two to the streptococcus, three to the staphylococcus aureus and two to the colon bacillus. The remaining one was due to the pneumococcus and the streptococcus.

Kriebich in a study of twenty-four cases found the pneumococcus alone in eleven. This organism with the colon bacillus was found in four cases and once each with Friedländer's bacillus, the staphylococcus aureus and the streptococcus. Triple infections were observed twice. The pneumococcus with the staphylococcus aureus and Ortner's coccus once, and with colon and Friedländer once. The colon bacillus, the streptococcus and Ortner's micrococcus were each found once alone, and the latter organism once with the colon bacillus, a sarcina and the tetra-

genus. Most of Kriebich's cases were in old individuals with cerebral lesions and belong under the head of aspiration pneumonias.

Pearce in his article on the bacteriology of lobar and lobular pneumonia studied forty-six cases of the latter in adults.. In these cases the streptococcus alone occurred in sixteen cases; the pneumococcus alone in twelve cases; the staphylococcus aureus alone in six cases; the staphylococcus albus alone in one; the colon bacillus alone in five cases. Streptococcus, aureus and pneumococcus occurred twice; streptococcus and pneumococcus twice; streptococcus and aureus once; and pneumococcus and aureus once.

Ritchie who has recently studied the bacteriology of bronchitis and incidentally of broncho-pneumonia, refers to the incidence of bacteria but does not analyze his individual cases. The organisms most frequently found by him were the pneumococcus, the streptococcus and the colon bacillus.

Before speaking of the bacteriology of our own cases, a word must be said of the technique employed. The cultures were taken from the lung at the time of autopsy by burning the surface with a red hot knife, a puncture being also made through the burned area with a red hot knife. The culture was taken from this puncture. Cultures were made on agar or blood serum slants, preferably the latter, and the organisms isolated were studied on different media. The tubes made at autopsy were usually plated subsequently, and if any doubt as to the identity of an organism existed animal inoculations were resorted to. Cover slips were made in some cases, but unfortunately not in all. The naked eye diagnosis of lobular pneumonia was in every instance confirmed by the microscope.

In our own series of seventy-one cases, fifty-three were in adults. Thirty-three of these were single infections. The bacterial incidence was as follows: Streptococcus nine, colon eight, staphylococcus aureus seven, proteus vulgaris three, pyocyaneus and paracolon each two, pneumococcus and staphylococcus albus each one.

The bacterial incidence in the twenty cases of mixed infection was as follows: Colon and aureus four, colon and streptococcus three, aureus and streptococcus three, colon and pneumococcus two, colon and citreus two, typhoid and streptococcus two, colon

and pyocyaneus, pneumococcus and pyocyaneus, colon and albus, *lectis aërogenes* and streptococcus each one.

The literature dealing with lobular pneumonia in childhood relates chiefly to the forms following diphtheria and the exanthems, Netter, Neumann, Queisner and Dürck, however, take up the subject from a general standpoint.

Netter studied forty-two cases. Of these twenty-five were simple infections, ten being due to the pneumococcus, eight to the streptococcus, five to staphylococci and two to Friedländer's bacillus. Seventeen cases showed mixed infections. Pneumococcus and streptococcus five, streptococcus and staphylococcus five, streptococcus and Friedländer three, pneumococcus, staphylococcus and streptococcus two, pneumococcus and staphylococcus, and pneumococcus and Friedländer each one.

Neumann studied sixteen cases. He found the pneumococcus pure in ten of them, and with the aureus and albus in one. Of the remaining five cases one was negative, one due to an unknown bacillus and the remaining three due to the staphylococcus aureus, the streptococcus and aureus, and the proteus and pyocyaneus respectively.

Queisner studied eight cases in all of which the pneumococcus was found. It was alone in four of them, with the streptococcus in three, and with the aureus in one.

In Dürck's series of cases eleven occurred in diseases other than diphtheria and exanthems. Only two of these were simple infections, one due to colon, the other to Friedländer. The remaining nine were mixed. Two were due to pneumococcus Friedländer, and a sarcina, and two to pneumococcus Friedländer and aureus. One each of the following combinations were found: pneumococcus and streptococcus, pneumococcus, streptococcus and aureus, pneumococcus and aureus, pneumococcus, aureus, and colon, and pneumococcus and sarcina.

Of our seventy-one cases eighteen were in children. Twelve of these were single infections. Of these five were streptococcus, two aureus, two colon, one pyocyaneus, one an unidentified bacillus, and one sterile.

The six mixed infections were three of them due to aureus and streptococcus, two to colon and streptococcus, and one to aureus, albus and streptococcus.

In comparing our results with those of others it will be seen

that in our cases the pneumococcus is a rather rare organism, as is Friedländer's bacillus, whilst other organisms which are rarely met with in other reports are relatively common, such for example are the pyocyaneus and the proteus vulgaris. It will also be noted that the colon bacillus was observed quite frequently both alone and in combination in our series. Thus in the adult cases the colon was present in eight out of thirty-three single infections and in thirteen out of twenty mixed infections.

The rarity of the pneumococcus is explicable on several grounds. It occasionally fails to grow on media even at incubation temperature, and would thus be missed in cases without cover slip control. It is easily outgrown by other organisms, especially the colon bacillus, which was present in quite a large per cent. of our cases. The rarity of Friedländer's bacillus is not explicable in like manner. Perhaps the suggestion is not too far fetched, that there is to a certain extent a geographical distribution of bacteria, and that organisms which are common in one locality are rare in another. In a series of about 250 autopsies studied bacteriologically, we have observed Friedländer's bacillus but four times, whilst the bacillus pyocyaneus has been met with in over twenty-five autopsies out of this number. The great infrequency of true lobar pneumonia in our autopsies would suggest that perhaps pneumococcus infections are more uncommon here than in New York for example. Several practitioners in Albany have stated to me that many of the cases of pneumonia seen there are atypical in their physical signs and often do not show the characteristics of frank pneumonia. A comparison between New York and Albany as regards the death rate from acute respiratory diseases show that in some months the death rate is three times higher per 1,000 of population in New York than it is in Albany. Unfortunately these statistics do not separate lobar from lobular pneumonia.

The frequency of the colon bacillus is, we think, largely due to agonal or post mortem invasion. This is shown in our series by a comparison of the lung bacteriology with the general bacteriology. Thus in the fifty-three lobular pneumonias in adults, the colon bacillus was present either alone or with other organisms in twenty-one. In twelve of these cases there was a general colon invasion. In seven out of the eight simple colon lung infections, there was a general distribution of the colon bacillus throughout

the organs. In the eighteen cases in children the colon bacillus was present in five, and in two of these there was a general colon invasion. That the colon bacillus could have entered the lungs in the remaining cases by the upper air passages seems quite possible since Grimbert and Choquet claim that it is frequently present in the mouths of healthy people. Whether it is present as the cause of the lesion or merely as a secondary invader in lobular pneumonia is difficult to say. On the one hand there are undoubtedly colon bacilli of marked virulence, and on the other the colon is notorious as an organism which frequently overgrows other bacteria of common pathogenic import and masks infections by them. In lung infections the pneumococcus is so frequent and so easily masked by other invaders that it would seem almost certain that in some cases where the colon only was found it had displaced the pneumococcus.

In connection with the bacteriology of lobular pneumonia the question of bacteria in normal lungs and in congested or œdematous lungs is of interest. The majority of the writers on the bacteriology of normal lungs seem to incline to the belief that during life they are sterile. Ritchie in his recent careful study comes to this conclusion, and several other authors agree with him. Beco, after a careful study, concludes that normal lungs can be sterile, but that they frequently contain bacteria of the varieties which are usually associated with broncho-pulmonary infections. Dürck, who studied the subject in connection with his work on broncho-pneumonia, seems to think that the great majority of healthy lungs contain bacteria and usually pathogenic varieties. Both Beco and Dürck seem to regard the air passages as the source of these bacteria, and with normal lungs from healthy men or animals, this doubtless is their most probable origin, colon invasions being excepted. In dealing with diseased individuals the question of the pulmonary infection being part of a general infection must be considered. With the object of determining the bacteriology of the lung in acute and chronic passive congestion, in œdema and in combinations of these conditions, I have examined a number of lungs in which these conditions were present.

Of twenty lungs which were acutely congested, six were sterile. The other fourteen contained bacteria of the following varieties:

Colon alone in six cases, with aureus in three, with albus in

one, with Friedländer in one. Streptococcus alone was found twice, and aureus, typhoid, lactis ærogenes and Friedländer each once. In all but six of these cases there was a general infection besides the pulmonary infection. Of these six the infection was colon in one, lactis ærogenes in one, aureus in three, albus in one. In none of these six cases was there any evidence of bronchitis microscopically. In three out of the cases with general infection, some of the alveoli contained besides blood a small number of polynuclear leucocytes. Perhaps this should be interpreted as indicating an early stage of pneumonia.

Of six cases of chronic passive congestion examined, all were sterile, a somewhat suggestive fact taken in connection with the well known relative resistance of such lungs to tuberculous infection.

Of four cases of œdema examined all contained bacteria. In one the pneumococcus was found, in two the proteus vulgaris, and in one the aureus and colon. The case with aureus and colon showed a general colon invasion, and in one of the proteus cases there was a general proteus infection. This left three out of the four cases with a local infection without general infection, and in none of these was there evidence of bronchitis.

Seventeen lungs which were both œdematous and congested were examined and only two were sterile. Colon alone was found in nine cases, but in seven of these there was general colon invasion. Colon was also found once with aureus and once with albus, but here again there was general colon invasion. The typhoid bacillus and the aureus were each found once associated with general infection with the same organisms. Of the fifteen cases in which bacteria were present, only six were cases of pulmonary without general infection, two being associated with colon, three with streptococcus and one with aureus. In one colon case a definite bronchitis was present, but in the other cases the bronchi were normal.

Four normal lungs were examined. All contained bacteria. One showed colon alone, two colon and albus, and one streptococcus. In all of the cases where colon was found there was a general invasion, and in one albus case there was a general albus infection. In two cases, one associated with albus and one with streptococcus, there was no general infection and no microscopic evidences of bronchitis.

These results show that both in normal and congested and œdematous lungs in patients dying of disease, the bacteria present in the lung are often present in the general system also, and are perhaps carried to the lung by the circulation. It is difficult to deny that the opposite may not sometimes be the case, the bacteria being carried from the lung into the general circulation. In some of the cases described definite foci of infection were present in the body aside from the lung, but in others no such localized inflammatory condition was present, and it seems not unlikely that in some cases of general sepsis the lungs may be the point of entry of the infectious agent, and yet show no change beyond congestion or œdema.

In this connection the relation of the infection in lobular pneumonia to general infection is of interest. Aside from the colon cases, which have already been discussed, a good many of the cases of lobular pneumonia were associated with general infections. Pearce seems to be the only writer who discusses this association. He states that in his cases where a local or general infection existed, the broncho-pneumonia was due to the same organism, and this in general has been our experience. Our experience does not, however, coincide with his second statement that in chronic diseases, as Bright's disease and chronic heart disease, the broncho-pneumonia was due to the pneumococcus.

In our cases of simple lung infection, general infection was present in nine out of fourteen streptococcus cases, in four out of nine aureus cases, in all of three proteus cases, in one out of three pyocyaneus cases, and in the single albus and pneumococcus cases.

In the mixed lung infections at times there is a generalization of both organisms, but at times only one of the two is generally distributed. Thus in two colon and citreus infections the citreus was generally distributed in both, in five colon and streptococcus infections both organisms were generally distributed in two, whilst in a third, the colon alone was generally distributed. In many of these cases the lung lesion was the only local evidence of infection, and doubtless the general distribution took place from it. It is questionable, however, whether the general distribution in some of these cases was not merely an agonal or post mortem invasion rather than a true septicæmia.

The relation of the distribution and the histological character of the lesions of lobular pneumonia to the type of infection has been noted both by Netter and Dürck. Netter studied particularly the relation between anatomical distribution and type of infection, but was able to make out no definite relation between different types of the disease and specific micro-organisms. Dürck studied the relationship from the histological standpoint, and also concluded that very varied pictures could be produced by the same organism, and that there was no definite relation between specific bacteria and specific types of exudation. The study of our cases has led us to agree with both of these statements, and we would further support the statement of Dürck that from a histological standpoint the exudate in lobular pneumonia cannot be differentiated from that of true lobar pneumonia in many instances.

The adult cases of lobular pneumonia were finally taken up from the standpoint of disease association, and particularly with regard to the bacterial associations occurring as terminal infections in typhoid fever and chronic diseases. Our object, particularly in the case of chronic diseases, was to determine the relation of the lung lesion to general infections, and to ascertain whether there was any particular bacterial association with specific diseases or disease groups.

Eight cases of broncho-pneumonia complicating typhoid fever were studied. In these the typhoid bacillus was present twice, both times with the streptococcus. The colon bacillus was present four times, twice alone, once with aureus and once with the pneumococcus. The pyocyaneus was present in one case and one case was sterile. In one of our cases in which the typhoid bacillus was present there was typhoid septicæmia, in the other a general streptococcus septicæmia. The broncho-pneumonia complicating typhoid has apparently been little studied. Pearce reports five cases in none of which the typhoid bacillus was present. Massalongo found the pneumococcus in two cases and Weichselbaum the staphylococcus aureus in one. Karlinski found the typhoid alone twice, and with the streptococcus twice in nine cases of lobar pneumonia during or after typhoid.

Besides typhoid fever the relation of broncho-pneumonia to chronic diseases of certain types was studied.

In ten cases of chronic nephritis with broncho-pneumonia, the

colon bacillus was found in six, alone once, twice with the citreus, and three times with the aureus, albus and pyocyaneus respectively. The aureus was found alone once, once with the streptococcus and once with the colon. The streptococcus was found once alone and once with the aureus. There was a general infection in seven of these cases, twice with the staphylococcus citreus, twice with the staphylococcus aureus, and once each with the streptococcus, colon and pyocyaneus respectively.

In six cases of lobular pneumonia with arterio-sclerosis, the colon bacillus was found four times, twice alone, and once with the pneumococcus and aureus respectively. Of the other two cases, one showed streptococcus, the other proteus. There was general infection in three of these cases, with the pneumococcus once, the proteus once, and the colon and aureus once.

Six cases of lobular pneumonia complicating cerebral lesions showed the aureus four times, and the colon and the streptococcus each once. One aureus and one colon cases showed general infection.

Three cases of lobular-pneumonia in cirrhosis of the liver each showed the colon bacillus, alone twice and once with streptococcus. The last named case only showed general infection, and that with colon.

These results show that in terminal broncho-pneumonia the pulmonary infection was associated with a general infection in sixteen out of twenty-five cases. They also show that there is no particular bacterial association with specific diseases or diseased groups. The apparent exception was the broncho-pneumonia associated with cerebral lesions, in which the staphylococcus aureus was found in four out of six cases. This number of cases is too small a one from which to formulate conclusions, and this finding is not corroborated by the cases of Pearce and Kreibich. The main conclusion to be drawn from these cases would seem to bear upon the relation between congestion and œdema of the lungs, and lobular pneumonia on the one hand and general infections on the other. The cases seem to show that with merely congested or œdematous lungs, as with broncho-pneumonia, a general infection is frequently present. As in many of these cases no bacterial lesion can be found aside from the pulmonary one, it seems likely that the lungs are much

more frequently the portal of entry in general infection than is generally supposed, and that often without marked pulmonary lesions.

BIBLIOGRAPHY

- BANTI. *La Sperimentale* Vol. XLIV, 1890.
 BECO. *Archives de Médecine Experimentale*, Vol. IX, No. 3, 1899.
 DÜRCK. *Deutsches Archiv für klinische Medizin*, Vol. 58, 1896-7.
 GRIMBERT ET CHOQUET. *Comptes Rendus de la Societe de Biologie*, October 25, 1895.
 KARLINSKI. *Fortschritte der Medizin*, Vol. 7, p. 681, 1889.
 KREIBICH. *Beiträge zur klinischen Medizin und Chirurgie*, Heft 13, 1896.
 MASSALONGO. *Gazetta degli Ospedali*, Vol. 8, p. 683, 1887.
 NETTER. *Archives de Médecine Experimentale*, Vol. IV, p. 28, 1892.
 NEUMANN. *Jahrbuch für Kinderheilkunde*, Vol. 30, p. 233, 1889-90.
 PEARCE. *Boston Medical and Surgical Journal*, Vol. CXXXVII, No. 23, p. 561, 1897.
 QUEISNER. *Jahrbuch für Kinderheilkunde*, Bd. 30, p. 277, 1889-90.
 RITCHIE. *Journal of Pathology and Bacteriology*, Vol. 7, No. 1, 1900.
 WEICHSELBAUM. *Wiener medicinische Jahrbucher*, Vol. 82, p. 483, 1886.
 WRIGHT & STOKES. *Boston Medical and Surgical Journal*, Vol. CXXXII, No. 14, 1895.

A SINGLE EXPERIENCE WITH VON RUCK'S "TUBERCULINUM PURIFICATUM."*

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Mrs. C., 29 years of age, called upon me in January, 1900, complaining of tenderness and pain in the nose, and a thick discharge, with the formation of large scabs in the nose. These conditions had been noticed for the preceding three or four weeks. On two occasions during this time, she had coughed up what she thought was gristle. She showed them to her husband, threw them away, and thought no more about them. About the time she called on me, a small piece of ragged bone was found on the handkerchief after blowing the nose. Examination of the nose showed redness and swelling, with entire loss of the triangular cartilage; a large irregular ulcerated surface, discharging pus, along the inner sur-

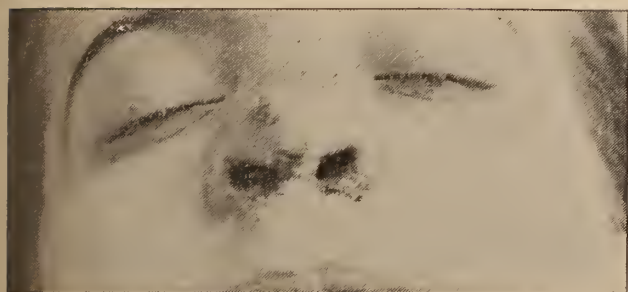
*Read before the Medical Society of the County of Albany, April 10, 1901.

To Illustrate Dr. Hale's Article on "A Single Experience with von Ruck's
'Tuberculinum Purificatum.'"

Albany Medical Annals, August, 1901.



No. 1



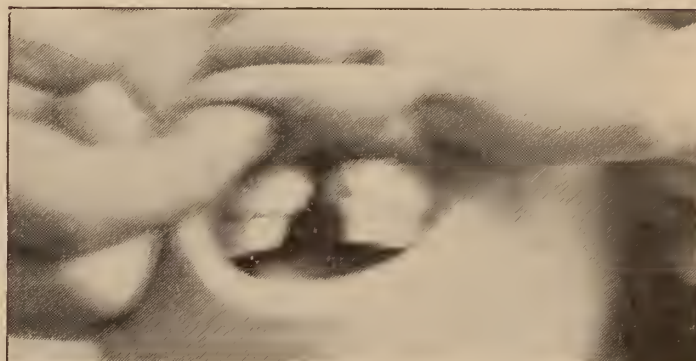
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No. 5

face, of left ala of nose. Examination of the mouth showed ulceration of the uvula. There was no history of tubercular or syphilitic infection. Anti-syphilitic treatment was instituted, based upon the rapidity of the process, the dual location of the ulcerations, involvement of the osseous tissue, and a history of repeated abortions at two months or less with no local cause for them, in a patient anxious to have family. No examination was made at this time of the discharges from the nose. Mercurial treatment was not followed by improvement, and potassium iodide was added. The ulcerated surfaces were treated by local application of fuming nitric acid. Such treatment was followed by more rapid increase of the ulcerations, and in the course of two weeks, a grayish-white patch appeared on the roof of the mouth, in the proximity of the anterior palatine fossa. This patch was easily pierced by a probe, beneath which bare bone was detected, and it was possible to crowd the probe through the roof of the mouth, into the floor of the nose. The patient was advised to consult a nose specialist, who considered my slough a fungus, and returned with a written diagnosis of stomatitis aphthosa. This was shortly followed by loss of one upper incisor tooth, with loosening of one on each side, together with ulceration of the gum which had surrounded the lost tooth, and with necrosis of the alveolar socket. During this interval, the ulceration on the roof of the mouth near palatine fossa had extended backward. (The condition of the roof of the mouth with upper lip everted is shown in Figure 1.) Impressed with the conviction that this was something more mischievous than syphilis or aphthous patches, microscopical examination was made of the discharges, and tubercle bacilli were demonstrated. It was now the middle of March. Mercury and iodine had failed, and tubercle bacilli were demonstrable.

Koch's Tuberculin "New" was then used, beginning, as by directions, with one five-hundredth milligramme of "solid substance." In five weeks, the dose had been increased to two milligrammes repeated in two days. The largest and the last dose of this preparation was four milligrammes, which is the amount of solid substance contained in about one-half c. c. of solution as sold. During the reaction following the initial doses of one five hundredth milligramme, there was no rise of temperature, but severe headaches, which had not been present before, general

malaise, anorexia, nausea, but no emesis, and marked prostration, with considerable soreness at the point of injection. This dose was not increased during the first week of treatment. Doses of two milligrammes were soon followed by occasional chills, and paleness and coldness of the extremities. The doses were reduced and again gradually increased with the same train of symptoms, patient feeling indisposed to move from bed or couch during the greater part of the day. Doses of three and four milligrammes were followed in about one hour, by death-like paleness of extremities and lips, and perfectly cold extremities, with cardiac palpitation. During the administration of Koch's "New Tuberculin," the ulcerations present at the beginning of the treatment, showed a tendency to heal, and the soreness of the nose had somewhat improved. An enlarged lymphatic gland which was present beneath the body of the mandible on the left side, entirely disappeared. But during its administration, a new ulcer appeared at the junction of the uvula and soft palate, on the left side, which was finally checked in its extension, but not healed, by the topical application of lactic acid.

Again consultation was had. The patient was taken to another nose specialist, and a surgeon specialist. They separately agreed that although tubercle bacilli were present, there was syphilitic infection, basing the opinion upon the rapidity of the process and the involvement of the osseous tissue.

Acting on this advice, tuberculin was discontinued, and mercury with large doses of potassium iodide was given, with the result which accorded with my former experience with the same drugs in the beginning of my treatment, except that the ulcerations were noticed by her husband and myself, to increase more rapidly. The ulcerations crept along the lower margin of each nostril to the cutaneous septum between the nostrils (the cartilaginous septum was gone before I saw patient). During the use of the mercury and iodide, the tip of the nose became very red, and two small ulcers appeared upon it. The nasal discharges, which had lessened under tuberculin, again increased, and the extreme soreness returned. (Figures 2 and 3.)

Von Ruck's "Tuberculinum Purificatum" from Asheville, N. C., was now ordered by telegraph. When it arrived, May 25, the cutaneous septum between the nostrils was growing rapidly thinner, so that I feared it would not be able to support the end of the

nose. On May 25, a solution was made in the proportion of one minim (equivalent to something over one-twentieth cubic centimetre) of von Ruck's Tuberculinum Purificatum, added to four minims of a twenty per cent. solution of glycerin and distilled water, each five minims of this mixture contained one-twentieth cubic centimetre of the medicament, the tuberculin. Twenty minims of such a solution were given for the first hypodermic injection, equivalent to one-fifth cubic centimetre. There were no constitutional symptoms, and no soreness at the points of the injections. The injections were rapidly increased in amount and soon were given pure with no dilution with the glycerin solution.

On June 1, (ten days after the preparation was commenced) and on June 2 the patient was given in the morning five cubic centimetres, *double* strength Tuberculinum Purificatum (equivalent to ten cubic centimetres of single strength) and the same amount (ten cubic centimetres single strength) in the evening. The improvement in the ulcerations was very rapid from the first. My great anxiety to save the corroding cutaneous septum, was rewarded by the sight of new tissue encroaching daily over the raw surfaces. During the use of von Ruck's preparation, she was not obliged to remain in bed on account of constitutional disturbances, as while using Koch's. She gained strength constantly and soon came twice a day to my office for the injections.

On June 4, the ulcers on the tip of the nose were healed and the redness had almost disappeared. The marginal ulcers were healing as rapidly as they had previously increased. On June 7, every visible ulcer had healed except that on the roof of the mouth, which was kept open by the presence of necrosed bone (beneath palatal process of superior maxillary).

The injections were continued, and on June 27, all necrotic bone was removed by curetting. This resulted in a free passage through the roof of the mouth and the floor of the nose. One of the loosened teeth was extracted, and the alveolar margin corresponding to the two lost teeth was removed. Thus, by elevating the upper lip, it was possible to throw water from a syringe directly into the nose. Regurgitation of liquids from the mouth into the nose was prevented by a temporary roof made from chew-

ing gum, while allowing sufficient time for the parts to contract before fitting a dentist's plate.

The patient has remained well and gained in general health, with very little external disfigurement, except that end of nose has been drawn downward by the cicatricial contraction. She has worn a well-fitting dentist's plate (figure 4) carrying two teeth, since December, 1900, without annoyance.

It is of interest to notice the absence of objectionable symptoms under von Ruck's Purified Tuberculin, during a *very rapid increase* of dosage together with the decided and permanent results obtained in this case. On questioning the patient again, about this time, I learned that she had noticed an itching in the nose, and frequently picked and rubbed it, as far back as August previous to the January when I first saw her. The healed condition of the mouth, as it has been since August, 1900, is shown in figure 5).

Von Ruck prepares his Purified Tuberculin in the following manner: he cultures "tubercle bacilli upon glycerin bouillon, when the cultures have matured, that is to say, when the tubercle bacilli have grown to a thick film and showed no further growth, and when the surface layer breaks off and begins to fall to the bottom, then the fluid, inclusive of the bacilli is boiled in vacuum, at a temperature of about 130 degrees for two or three months. The object of this prolonged boiling and maceration is to extract from the tubercle bacilli as many proteids as possible. After such prolonged boiling the fluid is also concentrated in the same manner as Koch concentrates his, but it is further treated by the addition of an alkaloidal re-agent (sodic iodide of bismuth dissolved in acetic acid), by which the beef peptones and proteids from the meat extract are precipitated. When the re-agent causes no further precipitation, the precipitate is filtered out and the filtrate is again made alkaline, by which the sodic iodide of bismuth is caused to precipitate; filtering again, we again precipitate the filtrated liquid by the addition of absolute alcohol, and the precipitate which is now formed, is dried and dissolved in distilled water and standardized in such a manner that the remedy has a given strength." The preparation used in this case is not the same as von Ruck's Watery Extract of Tubercle Bacilli.

THE RESULT ON PUBLIC HEALTH FROM CHANGING
THE WATER SUPPLY AT ALBANY, N. Y.,
FROM INFECTED WATER TO A
FILTERED WATER.*

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The true measure of the efficiency of a filter is the effect on public health, and the reduction of deaths from certain unmistakable water borne diseases, as well as a general betterment in health conditions. The tables show comparisons between the year 1900, being the one calendar year that the filter has been in operation, with the previous ten years' records, although in the last four months of the year 1899 the filter was in operation, and the general average has the benefit of any decrease for those four months. In making comparisons it should be borne in mind that the only general improvement in sanitary conditions in our city has been the installation of the Filter Plant, and all tables show a reduction in death rates co-incident with the operation of the filters.

In the monthly bulletin for December, 1900, issued by the State Board of Health of New York, occurs the following:

"The number of deaths from all causes reported for the year * * * exceeds the mortality of 1899 by 6,647, and the average of the past five years by 8,000. The increase over last year has been in all the sanitary districts except those of the central and southern parts of this state. Typhoid fever was unusually prevalent in the autumn, causing 1,948 deaths, 350 above the average. Diarrhoeal diseases caused the average mortality, * * * notably increasing the late summer and autumn mortality of the rural parts of the state rather than the urban."

The above statements indicate then that there was an excessive mortality throughout the state, and that comparisons of the year 1900 with the average of previous years for this city does not give the advantage to the one year that rightly accrues to it. Notwithstanding this condition, we find that while the average number of deaths for ten years in Albany has been 2,186, the number of deaths for the year 1900 was only 1,742, a decrease of 444 deaths, indicating generally a better condition of health. (See Table 1.)

*Extract from a paper read before the American Water Works Association, June 18, 1901.

TABLE I—TOTAL DEATHS.

(From Records of Board of Health, State of N. Y.)

YEAR	MONTH												TOTAL
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
1890	353	204	203	197	147	152	198	196	143	133	161	178	2265
1891	210	203	246	268	179	174	191	168	153	162	196	233	2383
1892	336	195	233	194	193	178	265	197	168	187	195	217	2558
1893	234	173	194	189	191	149	176	162	137	165	158	212	2140
1894	213	178	211	199	194	187	226	160	148	142	132	172	2162
1895	220	236	231	223	188	152	166	165	139	164	193	268	2345
1896	207	172	222	179	184	173	187	172	155	140	149	161	2101
1897	173	252	231	180	143	141	175	118	145	138	155	162	2013
1898	174	144	169	149	167	131	167	157	158	156	140	192	1904
1899	235	212	213	189	146	154	156	127	*135	*138	*138	*148	1991
Total ..	2355	1969	2153	1967	1732	1591	1907	1622	1481	1525	1617	1943	21862
Av'rage	235	197	215	197	173	159	191	162	148	153	162	194	2186
1900 *	135	146	180	202	152	112	162	116	125	144	135	133	1742

* Filter in Operation.

Typhoid fever and sewage polluted water are almost synonyms, still typhoid fever does come from other sources than an impure water supply, and in the present year in our city three deaths and about twenty cases have been traced to an impure milk supply. The general and common cause of it in cities and villages is, however, an impure water supply.

By the typhoid standard the Albany plant has been proven an immediate and certain success. The average yearly deaths from this cause for ten years (including four months of filter use) has been eighty-four. The number of deaths last year was thirty-nine. Of these thirty-nine, fourteen were unmistakably alien or imported cases, for which the city's condition is not responsible. In previous years, when an epidemic of typhoid has occurred up stream either in Troy or Cohoes, an increase of cases has occurred in Albany. The last year was an exception to this rule, and not-

withstanding decided increases in both of the cities above us on the river, Albany decreased 54% in its number of deaths. (See Table 2.)

To 1-1-1901

TABLE 2—DEATHS FROM TYPHOID FEVER.

(From Records of Board of Health, State of N. Y.)

YEAR	MONTH												TOTAL
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
1890	13	5	4	6	2	5	1	7	6	3	4	6	62
1891	20	27	15	9	7	2	3	5	4	4	3	9	108
1892	4	5	7	4	1	0	3	4	3	4	10	5	50
1893	4	5	9	10	4	2	1	6	2	5	3	7	58
1894	7	5	10	3	4	6	2	6	3	1	1	4	52
1895	6	17	26	27	13	9	10	6	8	6	13	21	162
1896	25	12	17	4	3	6	6	6	9	5	3	1	97
1897	7	9	7	8	3	4	5	9	10	6	8	8	84
1898	12	8	8	4	3	1	3	20	12	5	7	11	94
1899	14	12	14	13	3	9	2	4	* 2	* 4	* 0	* 1	80
Total ..	112	105	117	88	43	44	36	73	59	43	52	73	837
Av'rage	11	11	12	9	4	4	4	7	6	4	5	7	84
1900 *	3	1	3	5	4	1	3	6	4	5	4	0	39

* Filter in Operation.

Another group is of "diarrhœal diseases." Diarrhœal mortality is not based upon so limited and direct causation as that of typhoid fever, which is only exceptionally due to anything other than infected drinking water, while in diarrhœal cases the mortality in early life is greatly affected by season, improper food, and the healthfulness of surroundings or lack of it. Water borne filth germs are a cause as well; they have a greater vitality in water than the typhoid bacilli, and they reach the intestinal tract in the same way, and while diarrhœa and dysentery are not limited to the operation of such specific germs as are typhoid and cholera, they may be caused by any germs which attend the decay of organic matter. I think it fair that the filters should be credited with the decrease in mortality from this cause. The average

number of deaths from diarrhoeal diseases for ten years (including four months of filter use) has been 120. Last year the number was seventy. The decrease is therefore forty-two per cent. (See Table 3.)

To 1-1-1901

TABLE 3—DEATHS FROM DIARRHOEAL DISEASES.

(From Records of Board of Health, State of N. Y.)

YEAR	MONTH												TOTAL
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
1890	2	3	2	2	1	12	51	27	19	0	1	4	124
1891	13	2	1	1	6	15	46	26	16	11	4	9	150
1892	4	3	2	3	1	13	75	40	14	4	0	6	165
1893	6	5	10	3	5	8	30	18	4	1	4	9	103
1894	4	4	4	3	3	6	51	20	8	7	3	5	118
1895	9	16	13	11	3	9	28	28	6	8	7	9	147
1896	7	5	4	7	3	15	38	16	16	7	3	5	126
1897	5	11	7	5	2	7	27	13	10	5	10	5	107
1898	4	1	3	1	3	9	26	14	17	5	1	4	88
1899	3	9	8	5	1	11	14	13	* 5	* 2	* 0	* 1	72
Total ..	57	59	54	41	28	105	386	215	115	50	33	57	1200
Average	6	6	5	4	3	10	39	21	12	5	3	6	120
1900 *	1	2	5	1	0	7	27	16	5	5	1	0	70

* Filter in Operation.

SOME OBSERVATIONS ON THE TREATMENT OF COUGH.

By G. FRANKLIN SMITH, M. D.,

Fernwood, N. Y.

Cough although only a symptom is so prominent a feature in many conditions of the respiratory organs that upon its relief often depends the comfort of the patient and his gratitude to the physician. This is not surprising when we consider the effect

of a prolonged harassing cough upon the nervous system. If not promptly relieved it becomes a source of serious exhaustion and not only prolongs the disease but retards rapid recovery. By this it is not intended to convey that a cough should be suppressed if it is fulfilling its useful purpose, namely, the elimination of the secretions from the air passages, but at any rate it can be rendered less frequent and more efficient. There is also a not infrequent class of cases in which cough is completely neurotic depending upon merely a hyperesthetic condition of the mucous membrane, and not being required to aid in removing the secretions.

For many years, in the management of coughs, morphine has been our standby, although its many objectionable features have been recognized by the medical profession, such as its tendency to produce nausea and constipation, as well as its undesirable effect in drying up the cough and causing an accumulation of mucus in the air passages, and thus increasing the patient's discomfort by interfering with the breathing. There is one derivative of morphine, however, with which I have lately had considerable experience, and which in the small doses required does not show many of the customary effects of morphine. One unique feature of this preparation, which is known as heroin, is its special action upon the respiratory mechanism. While it allays the irritation of the mucous membrane of the air passages it at the same time acts as a tonic upon the respiratory center, which is situated in the medulla oblongata, diminishing the frequency of the respirations and also augmenting their force. The soluble salt of heroin, the hydrochloride, has been mainly employed in my practice, and I have found it nearly as much a specific for coughs of every kind as morphine is for pain.

The cases cited below have not been selected, but represent a successive series. I trust that they will prove instructive and add to a more complete knowledge of the action of heroin hydrochloride and its method of administration.

Case I. Female, aged twenty-one; family history unknown, except that her father died in early manhood. She had been apparently well until attacked by grip, following which the lymphatic glands in the neck, elbow, and ankle suppurated, the elbow becoming ankylosed, etc. The cough attending the attack of grip persisted, alarming the patient and her friends, but no evidence of pulmonary lesion was discovered. Having

exhausted usual cough remedies, I gave heroin hydrochloride, 1-12 grain, three times a day, and before fifty doses had been taken the cough ceased and did not return.

Case II. Female, aged about fifty; family history good. She stated that she had enjoyed good health "until this cough came." All the domestic remedies were exhausted, and then she came to me. Diagnosis: Protracted acute bronchitic. Treatment: Constitutional remedies as needed, and for the cough, "brown mixture," ammonium chloride, syrup of pinus alba, with morphine, etc., in various combinations, but all to no avail. At last, I used heroin hydrochloride, but seeing that the patient had no longer much confidence in me, and that something must be done at once if I did not wish to lose the case; moreover, not realizing that it need not be given as often as other sedatives, I prescribed it every three or four hours. The result was the usual disagreeable after-effects of opium, causing the patient to feel worse, and I was discharged. What my colleague prescribed I know not, but she was ill for a month or more longer. This impressed me with the fact, as I hope it will all, that heroin hydrochloride must not, in usual doses, one-twelfth of a grain, be given as often as the ordinary remedies. The drug did not have a fair trial in this case, but I mention it to demonstrate the lesson in dosage, and to give a faithful report of failures as well as successes.

Case III. Female, aged about fifty; previous health good. She caught cold and coughed about two weeks continually despite domestic remedies. A condition developed similar to a mild pneumonia (possible it was a form of grip) with temperature about 101° F., etc. The cough continued even after the termination of the fever, nothing having more than a temporary effect until heroin hydrochloride, one-twelfth grain, was given, once in four hours during the day, but not at night, for two or three days, and then three times daily. The effect within the first two days was distinctly noticeable, improvement proceeding rapidly and being permanent. I do not believe that the result would have been as satisfactory without the use of heroin hydrochloride.

Case IV. Female, aged about seventy; very feeble, greatly emaciated, despondent, constipated, troubled with indigestion, etc. Expectoration was profuse, cough severe, frequent, and of many years' standing. A careful physical examination showed the presence of chronic bronchitis. Treatment consisted of constitutional measures, etc., and the administration of heroin hydrochloride. In less than one week the cough was much relieved, expectoration easy, but not diminished appreciably in amount. In two months the cough was practically all gone or reduced to an occasional hack. Expectoration was unaffected in quantity, but unattended with difficulty. The dose of heroin hydrochloride given was one-twelfth grain, two or three times daily. She still takes it in decreasing doses to prevent a return of the trouble.

Case V. Male, healthy, stout, aged about forty. He took cold, coughed a month, and finding domestic remedies of no avail, called at my office. Having no heroin hydrochloride, I gave tablets of "brown mixture," then

of "brown mixture" and ammonium chloride, then of "brown mixture," ammonium chloride and menthol, then combinations of Dover's or of Tully's powder with acetanalid, potassium bromide, etc. He said there was a feeling of "waving to and fro underneath the breast bone," causing the cough. Paroxysms of terrific and racking cough followed one another day and night until his strength was nearly gone, but no relief occurred. When the heroin hydrochloride arrived, I gave him one-twelfth grain once in four hours for two days, then three times daily, also administering syrup pinus alba every two to four hours, rapidly lengthening the intervals and reducing the dose of the latter, until since about the third day he took heroin hydrochloride only. Within three days the effect was noticeable, while before the week closed the cough, which had resisted every remedy for about six weeks, was decreased to but a little more than an occasional light paroxysm. At this writing I hear that he has scarcely more than one paroxysm a day, and that in the morning.

Case VI. Female, pregnant; acute bronchitis, without fever, etc., but with severe cough and aphonia. Treatment: Calomel for a laxative, mild counter-irritation to the chest, etc. For the cough syrup pinus alba, for two or three days only, and then heroin hydrochloride, one-twelfth grain, three times daily. The cough improved within two days, and was permanently relieved.

Case VII. Female; seven months pregnant; measles; intense dyspnea controlled to only a slight extent and temporarily by hypodermics of morphine, one-fourth grain. Premature labor ensued, but no appreciable relief of the dyspnea. As the eruption faded aphonia developed. From the day of the abortion I gave heroin hydrochloride, one-twelfth grain, every six hours, day and night, but was compelled to continue the hypodermics for two days. Despite the abortion and the fading of the eruption the dyspnea, cough, and aphonia (which had first appeared at the close of the labor), continued for two days, when it seemed that the heroin was doing the work, and all disturbances rapidly subsided. Natural course of the disease, think you? Perhaps; yet I believe convalescence was hastened by heroin hydrochloride.

In two cases of pertussis and one of sympathetic cough (probably) negative results were reported. I did not observe the cases myself, accepting the parents' statements. In one case of pertussis in a child of six years, taking heroin hydrochloride, 1-48 grain daily, the paroxysms were decreased in frequency to intervals of about eighteen hours; however, as the increased accumulation of phlegm seemed to produce unpleasant symptoms, and it seeming beneficial from the symptoms not to lessen the cough, the remedy was discontinued. This shows what heroin hydrochloride can do in pertussis.

A case of asthma was apparently relieved although a neigh-

boring physician tells me that he never obtained favorable results.

One man said he had coughed all winter (two months) but in three days on heroin hydrochloride, 1-12 grain, was cured. He experienced relief after the first dose.

I have noticed no depressing effect upon the heart. One man after taking a dose of 1-6 grain (double the dose ordered) saw many "visions" and was wakeful all night. One female experienced the same somnolence, hallucinations and pruritus from 1-12 grain, thrice daily, as from morphine in medicinal doses; another, the same hallucinations. A man experienced a mild delirium, some had mental hebetude and drowsiness, but always in a less degree than from morphine. Except in case two in which it was incorrectly given I have never known nausea to follow. In severe cases as above mentioned I have administered it four or five times daily for one or two days without noticing any unpleasant effects, although it is generally directed to be given but two or three times daily. Which is the better I cannot say. However, for the present I shall hold to my own rule. Moreover, where something must be done at once I prescribe about seven or eight minims of fluid extract of white pine compound, in glycerine and syrup or elixir of orange, every two to four hours, lengthening the intervals and decreasing the dose rapidly after the second day, sometimes giving heroin hydrochloride only from the third day on. The pinas alba quiets the cough at once to some extent until the heroin hydrochloride can finish the work. The former is more speedy in action, but transient, the latter while slower is more permanent.

Clinical and Pathological Notes

A Case of Purpura Haemorrhagica. By E. E. HINMAN, M. D.

Elizabeth M., aged 48, single, a native of U. S., has been an inmate of the Albany County Almshouse for a number of years, having been committed insane. She made a partial recovery but has since been feeble-minded, seldom speaking to anyone but generally answering questions put to her in an

intelligent manner, cleanly in her habits, industrious and has always eaten and slept well. Until her present illness her health has been good for a number of years.

On Sunday, March 18, 1901, she had several slight attacks of epistaxis and the expectoration was slightly bloody. By Sunday night the hemorrhage from the nose ceased but it became more profuse from the mouth and of a bright red character. An examination showed the inner surface of the left cheek swollen and covered with large dark red patches, which were raised above the surrounding tissues, from which the blood was oozing. There was one such patch on the hard palate and there were several in the naso-pharynx; the left side of the tongue was swollen and covered with these same patches, and the gums were swollen, livid and bled easily.

The next day these conditions were all more marked; her temperature was 101°F. ; pulse, 84 and of fair quality; heart sounds were normal, lungs in normal condition and splenic dullness normal. There was no oedema and the patient suffered no pain. The legs and arms presented numerous purplish spots about the size of a millet seed. These were most numerous below the knees and very characteristic. The breath was very fetid and characteristic of such hemorrhagic conditions. She was placed on a milk diet and given one-thirtieth grain of phosphorus every three hours. Tuesday a profuse haematuria showed itself and the stools became very black, the other conditions remaining the same, the temperature dropping to 100.5° . By Wednesday the bleeding was markedly less in amount and dark brown in color as it came from the mouth and bladder. The spots on the ankles became quite confluent and a large ecchymotic patch covered the left cheek and side of the neck; temperature dropping to 99.6° , and the pulse to 80 and quite weak. One-half ounce of whisky was ordered every three hours and the phosphorus was given after meals. All bleeding had ceased from the mouth and fauces by Thursday and by that night the urine was clear. Friday found her very weak, but not in any distress, and not losing any blood. The phosphorus was continued three times a day for three days longer and full doses of tincture of ferric chloride and dilute phosphoric acid were added. During the next few days the lesions had

all disappeared from the pural cavity, the ecchymosis faded out and the purpuric spots gradually became lighter, and she has since made an uneventful recovery.

The urinary examination showed blood in large amounts, some albumen, but otherwise nothing abnormal. Examination of the blood by Dr. Blumer revealed a marked leucocytosis with a great reduction of red cells and haemoglobin but no organism.

Correspondence

LETTER FROM VIENNA

VIENNA, Austria, *June 21, 1901.*

To the Editors of the ALBANY MEDICAL ANNALS:

Vienna is of especial value as a medical centre, because, on account of the great number of cases and the different professors on the same subject, one can study at the same time different lines of treatment. This is strikingly seen in the difference in the modes of treatment by Prof. Lang and Prof. Neumann. Lang's treatment of syphilis differs from that of Neumann in that he uses the oleum cinnarium and gives subcutaneous injections, while Neumann uses the soluble salts of mercury and gives intramuscular injections. Lang chooses the interscapular region for his injections while Neumann injects into the gluteal muscles.

Prof. Lang, however, is more particularly known for his treatment of lupus vulgaris and more cases of that disease can be seen in his clinic than in any other here or perhaps in the world. He has quite a variety of methods varying according to the character of the case. In those cases where the disease is more superficially located with no breaking down of tissue and consequent ulceration, he applies pure carbolic acid. The surface and particularly the margin of the lesion are lightly but thoroughly touched. In other cases of much the same character he uses ethyl chloride, freezing the lesion day after day until the activity of the disease-process is arrested. Of the more radical methods of treatment the one that is more

particularly his own is the destruction of the lupus growth by super-heated dry air. This method is employed when the mucous membranes are involved. In these cases, he claims, the disease is bound to recur and an extirpation for radical cure would be useless. He has invented an instrument for this operation. This consists of a large Paquelin cautery, the point of which is covered by a large metal cylinder with a window on the superior surface so that one may see the point of the cautery and determine the degree of heat. The cylinder terminates in a beak which is convex laterally and from above downward. The beak is perforated at its lowermost point by an opening 1-16 inch in diameter. The cautery is supplied with three bulbs, one of which furnishes air to the cautery proper while the other two force a current of air over the white hot cautery through the beak of the cautery upon the lupus lesion. This destroys everything before it and is the only operation for destruction or removal of lupus in which a general anaesthetic is used. Besides this operation, extirpation under cocaine and Sleich's solution with skin grafting after Thiersch's method and plastic operation, where cosmetic effects are more particularly desired, there is a method called here the "Stille lose Lappen," which consists in transplanting without a flap a section consisting of all the layers of the skin. The section is large enough to fill the wound in one piece.

Lang does not use the Roentgen rays in the treatment of lupus but Neumann does. One is surprised to see the operations that are performed here under local anaesthesia. A few days ago an extirpation of a lupus growth involving the entire right cheek from the lower margin of the eye to a point reaching down over the jaw half way to the clavicle was done under a local anaesthesia. The operation was so severe and the loss of blood so great that the patient was almost pulseless when the operation was finished. This is only one example of the many severe operations performed under local anaesthesia.

Yours sincerely,

JAMES W. WILTSE.

Editorial

"He is a physician eminent in diseases of the throat and lungs; about forty years of age, a very pleasant, cultivated, quickly perceptive man, easy and genial-mannered. After a glass of excellent burgundy, he assumed his professional character, and gave hopeful opinions respecting Sophia's case, and ordered some allopathic medicines, which she has great scruples of conscience and judgment about taking; but for my part, I am inclined to put faith in what is tangible."

NATHANIEL HAWTHORNE.

Nathaniel Hawthorne and His Wife,
Vol. II. p. 128.
Third Edition.

A Hospital for Contagious Diseases The City of Worcester, Massachusetts, has set an example in providing for cases of contagious disease, which may well be imitated. Taking advantage of a law enacted by the State legislature, in 1894, partly permissive and partly mandatory, the City Board of Health secured an appropriation from the City Council for the erection of an isolation hospital, which was completed and in operation in November, 1896, at a cost of \$50,000. The hospital is described in the *Boston Medical and Surgical Journal*, of July 4, 1901, by Dr. May Salona Holmes, the Superintendent and Resident Physician. It consists of an administration building, between two pavilions connected by corridors, for diphtheria and scarlet fever, respectively, and a detached structure in the rear for the laundry, sterilizing plant, morgue and chapel. Provision is made in the ward buildings for private rooms. The largest capacity of the hospital is forty-eight, and the daily average for the past year has been twenty-five; in 1900 there were treated 338 patients; the average net cost per year for maintenance has been \$6,849. A training school for nurses is being established, and nurses from the City Hospital are also given the opportunity of the special experience.

The reduction in the mortality of diphtheria has been universal since the introduction of antitoxine. At the Worcester Isolation Hospital this reduction, however, has been greater than in the city at large, the rate of the city having been lowered in 1897 by 2.62 as a result of the hospital treatment; in 1898, the reduction was .85; in 1899, 1.17, and in 1900, .77. Since the opening there have been treated 479 cases of diphtheria, with 38 deaths, giving

a mortality rate of 7.93. During the first two years there were no deaths from scarlet fever. The rules of the hospital provide for rigid quarantine, but some embarrassment has been met in patients presenting both diseases, and Dr. Holmes recommends an additional pavilion for these mixed cases.

From the experience at Worcester, certain definite results have been shown. Perhaps the most important ones are negative and not visible, but Dr. Holmes believes that there can be no question that epidemics have been averted. This is especially true of the cases breaking out in public schools, private institutions, factories, boarding houses and hotels. Servants in private families have been among the appreciative admissions. Last, but not least, the systematic study of the collected cases have been of distinct value in the knowledge of the diseases. The city of Worcester is to be congratulated upon the early solution of this difficult problem, and other cities should profit by the example. Among them Albany should be one of the first.

"Clinical Days" at the Albany Hospital The course for medical and surgical men designated as "Clinical Days" has attracted some attention in the field surrounding Albany. The "day" is Tuesday of each week throughout the summer and the "Clinics" are held in the beautiful amphitheatre of the Albany Hospital, this institution with its equipment having been offered by the Board of Governors of the Hospital as a fitting place in which to hold the lectures and demonstrations. The attendance averages sixty every Tuesday morning, although over a thousand notices are sent out every Saturday with the program for the following Tuesday and about three hundred of the profession have brought themselves at various times in touch with the movement, from its inception. Cards are furnished the out-of-town members granting them the privileges of the Albany Club, where most of them gather for their noon luncheon. These cards are furnished by the Secretary as soon as a doctor registers.

The course opened on July 2nd with an introductory address by Albert Vander Veer, M. D., senior surgeon to the hospital. This address was followed by a demonstration clinic in surgery, diagnosis and operations by Dr. Vander Veer and Dr. Macdonald.

In the afternoon the gentlemen met Dr. Blumer at the Bender Laboratory and listened to a few general remarks on the use of

the microscope, with a lecture and demonstration on the method of examination for the tubercle bacillus. Following this Dr. Samuel B. Ward delivered a clinical lecture in the hospital on chronic nephritis, illustrating his points with cases drawn from his private practice and from the hospital.

On the 9th of July, Dr. James P. Boyd delivered an address in clinical gynæcology, followed by a demonstration of cases in the surgical wards by Dr. Macdonald, and next by Dr. C. H. Richardson, who gave a practical demonstration of methods for sterilization of dressings, instruments, and water, especially adapted to private practice.

In the afternoon Dr. Arthur W. Elting demonstrated and lectured upon the significance of blood, pus and crystals in the urine. At three thirty, Dr. Henry Hun followed with a clinical lecture on locomotor ataxia and exhibited several patients in various stages of the disease. The course is continued after the program published in the ANNALS of June last.

State Medicine

Edited by Harry Seymour Pearse, M. D.

UNIFORM MEDICAL LEGISLATION IN THE UNITED STATES

The following article by Dr. Emil Amberg of Detroit, Mich., is especially important because it points out what is perhaps the *only* way of dealing successfully with the question in hand. He places the problem of uniform medical legislation in the hands of the "people." He sifts the matter down to hard facts and realizes that after all resolutions of medical societies, examining boards and individual and general arguments have been considered, the representative of the people, *the legislator*, is the one to make the law. As we understand it *he* is the one whom the author would have reached and convinced of the necessity of a uniform license. If this is Dr. Amberg's idea we agree with him perfectly, but to try to accomplish anything through the people at large would be a waste of valuable time. There is nothing that the average legislator dislikes more or gives less attention than a mass of letters, petitions or resolutions on

a subject like this, which is more or less technical and of which he possibly has never heard. What he wants and will sooner or later demand is a succinct statement of needs and wants coming from a reliable and representative source. In this particular case, as in many others, in fact, it is essential that the doctors agree before bringing the question before a legislative body. In the past, action without this agreement has always precipitated an unseemly controversy, cast reflection upon the medical profession and injured the cause in question. It will be the same in the future. The licensing boards of the different States should confer and come to some agreement. If the establishment of a National Medical Examining and Licensing Board is considered that solution of the problem most equitable, well and good; submit a bill to Congress embodying this principle and let the whole profession support it unanimously. Above all, avoid controversy in the profession, it will defeat *any* solution proposed. We give here the article of Dr. Amberg, who holds the position of Secretary of the Committee on Interstate Reciprocity and Uniform Medical Legislation of the National Confederation of State Medical Examining and Licensing Boards:

Conditions which exist in regard to the license to practice medicine in the various political divisions of our country have thus far escaped the necessary attention on the part of the public. It must be taken for granted that very few people outside of the medical profession, have an idea of the serious problem which must confront them in the near future. The fact that a physician who is allowed to practice medicine and surgery in one state or territory is regarded as unfit to treat people in another political division necessarily invites every intelligent citizen to investigate the reasons for such a state of affairs.

In any country the lives of all citizens should be valued equally high. This is not the case in the United States. Anyone who is familiar with the different medical laws in the various states and territories cannot conceal his grievance and indignation that conditions are allowed to exist which reflect upon the intelligence of many, and on the good will of some, in a way so strange to the American mind and so little in accord with the general interest in other public matters.

Many states absolutely refuse, within their jurisdiction, the license to practice to the same physicians whom citizens of other states legally authorize to exercise their professional duties, and to whom they intrust their own lives and those of their families. This fact can be explained only in two ways. Either the standing of those physicians is not sufficiently high for the former states or the former states intend to protect

their "home industry." Although it must be admitted—and we cannot help being ashamed of this fact—that the last mentioned reason seems to prevail in a few instances, in the greater majority of cases the responsible parties in many states do not recognize the standard of the medical men who are accepted in others as sufficiently high. Special boards, created in most of the divisions, have the duty to exercise a controlling power over the physicians who intend to practice within their boundaries. Recognizing that the standard of a physician depends upon the general and medical education which he received, it is necessary for those who are responsible to the community for those whom they allow to practice to extend their control to the preliminary education of the student who intends to become a physician and to the medical education proper.

If all physicians would be equally well trained, no political division would be justified in refusing recognition to the physicians of another division. That all physicians should be equally well trained, so far as it is possible, cannot be disputed. In order to educate properly a student that he may become a good physician, we must have medical schools of a high standard, and only those.

It is admitted that we have too many medical schools and that we are in need of a greater number of good ones. It would be a wise step to close about three-fourths of the medical schools now existing, and to place the rest under rigid state control; or, what would be still better, to make them state institutions, as, for example, the University of Michigan Medical School, even admitting that some of the private schools are satisfactory.

Many of the medical schools now existing are the property of corporations for the benefit of a few. Special privileges have been granted to these combinations. This should never have been done.

That the existing conditions reflect upon the whole medical profession is easily understood, and it cannot be denied that the public in general should have more interest in a question which concerns every citizen.

So far as the physician is concerned, the overcrowding of the medical profession, especially with so many inefficient men, who have the same rights as others is one of the most serious questions. It is reported that there is one physician to less than 600 inhabitants in the United States; whereas the ratio in Great Britain is one to 1,100, and in Russia one to 8,500. There are in the United States, proportionately, six times as many practitioners as in Italy, about four times as many as in France and in Germany, and there are about 156 medical schools in our country to twenty medical schools in Germany. In aiming at "interstate reciprocity for the license to practice medicine and at uniform medical legislation" all points mentioned, besides others, must be considered.

The importance of the movement is recognized more and more every day by the medical profession, and the public will undoubtedly take a hand as soon as it understands the subject more thoroughly. The question is a comparatively simple one, and it can be dealt with more satisfactorily if the public at large interests itself in the same to a greater extent.

A great problem is before the people of the United States. Its solution should not be delayed.

In Memoriam

TABOR BURTON REYNOLDS, M. D.

Tabor Burton Reynolds, oldest practicing physician of Saratoga Springs, died at his home on Wednesday, July 3, 1901. A son of the late Dr. Henry and Mary Reynolds, he was born in Wilton, Saratoga country, April 8, 1821. After a thorough preliminary education, he began reading medicine with his father; later he pursued his medical studies under the personal tuition of Drs. March and Armsby, of the Albany Medical College, from which institution he was graduated June, 1842. He was associated with his father in practice in Wilton until the death of the latter; he was then in partnership with his younger brother until 1870. After the death of his brother, he removed to Saratoga Springs, where he has since resided, devoting himself exclusively to the active practice of his profession until his death.

By his skill as a physician, his honorable character as a man, his energy in business and his genial personal qualities, he endeared himself to the people of Saratoga. For many years he has been a conspicuous member of the Saratoga County Medical Society, of which he was president in 1857. He was a member of the New York State Medical Society, and in 1884 was one of the original founders of the New York State Medical Association, in which organization he was very active. He was also a member of the American Medical Association, and served as president of the Union Medical Association of Saratoga, Washington and Warren counties in 1872.

To Dr. Reynolds were allotted more than the years ordinarily given to a man for active service. For more than sixty years he was engaged in the practice of medicine. In his death Saratoga has lost one of its best citizens, and the medical profession of the State, one of its ablest pioneers. His influence was towards the best in his profession, as well as toward progression in municipal affairs.

D. C. MORIARTA.

GEORGE HAMILTON McMURRAY, M. D.

Dr. George Hamilton McMurray, thirty-four years of age, died July 13, 1901, at his home in Glens Falls, after an illness of

several years. He was the son of Mr. and Mrs. George McMurray, of Fort Edward, and was born in Argyle. He was graduated from the Albany Medical College in 1887. He married Miss Ida May Haviland, who survives, as do his parents and two brothers, John R. and Alfred S. McMurray, of Fort Edward. The deceased was a Mason, a member of the Royal Arcanum and a Republican. He served several years as village health officer, and at the time of his death was town health officer and a member of the local board of pension examiners.

Public Health

Edited by Joseph D. Craig, M. D.

DEPARTMENT OF HEALTH—CITY OF ALBANY, N. Y.

ABSTRACT OF PRINCIPAL CAUSES OF DEATH, JUNE, 1901

Deaths

Consumption.....	26	Homœopathic Hospital.....	4
Typhoid fever.....	3	County House.....	2
Scarlet fever.....	1	Penitentiary... ..	2
Diphtheria.....	0	St. Margaret's Home.....	4
Chicken-pox.....	0	Little Sisters of the Poor ...	0
Whooping cough.....	0	Home of the Friendless.....	0
Measles.....	0	Home of the Aged.....	0
Cholera infantum.....	2	Albany Jail.....	1
Erysipelas.... .	0	Hospital for Incurables... .	1
Influenza	1	St. Vincent's Female Orphan	
Pneumonia	3	Asylum	1
Broncho-pneumonia.... .	2	Albany Orphan Asylum.....	0
Apoplexy.....	11	Hudson River.....	1
Bright's disease.....	16	Sacred Heart.....	0
Cancer.....	7		
Accidents and violence.....	7	*Total deaths.....	145
70 years and over.....	25	Total deaths, June, 1900.....	114
1 year or under	19	Death rate June, 1901	15.87
Albany City Hospital.....	13	Death rate June, 1900.....	12+
St. Peter's Hospital.....	3		

Births..... 149 *Marriages*..... 106

*The increased death rate for June, 1901, is common to cities and is probably accounted for by the excessive heat.

ABSTRACT OF REPORTS FROM THE STATE BOARDS OF HEALTH

Iowa, month of April, smallpox in 79 localities.

Kansas, month of May, smallpox in 50 localities, with an aggregate of 741 cases with 4 deaths.

Louisiana, month of April, deaths from smallpox, 5.

Michigan, month of May, smallpox at 153 places, 14 places more than during the month of April.

This disease continued steadily to spread because it was first called "Cuban Itch," "Cedar Itch," "Chicken-pox," "Acne."

Ohio, month of April, 6 deaths from smallpox.

Pennsylvania, month of May, 2 deaths from smallpox.

Wisconsin, for year ending September 30th, 1900, 446 cases, with 15 deaths.

VACCINATION

Public Health Reports, Marine Hospital Service, January 6, 1899

The most efficient means for preventing the spread of small-pox is by vaccination. The protection, provided the virus is pure, is believed to be as complete against contagion as is that of small-pox against a second attack, though not of as long duration, but revaccination, whenever small-pox is prevalent in a community, will continue this protection indefinitely. Therefore, the first measure after isolation of a person suffering with small-pox is the immediate vaccination of all persons who have been exposed to the disease and revaccination in five or six days if there is no indication of the previous virus having been effective.

In the communities where compulsory vaccination is not required for children going to public schools, it will frequently be found that a large proportion of the pupils, unless an epidemic of the disease has recently occurred, have not been vaccinated, and it is among these that small-pox is more apt to be spread.

Dr. Bizzozzi, in a recent lecture delivered at Rome, recalled strikingly to his audience the success of vaccination in Germany. He said: "Germany stands alone in fulfilling in a great measure the demands of hygiene, having in consequence of the calamitous small-pox epidemic of 1870-71 enacted the law of 1874, which makes vaccination obligatory

in the first year of life, and revaccination obligatory at the tenth year. What was the result? With a population of 50,000,000 having in 1871 lost 143,000 lives by small-pox, she found by her law of 1874 the mortality diminished so rapidly that to-day the disease numbers only 116 victims a year. These cases moreover occur almost exclusively in towns on her frontier. If it were true that a good vaccination does not protect from small-pox, we ought to find in small-pox epidemics that the disease diffuses itself in the well vaccinated no less than in nonvaccinated countries. But it is not so. In 1870-71, during the Franco-German war, the two people interpenetrated each other, the German having its civil population vaccinated optionally, but its army completely vaccinated, while the French (population and army alike) were vaccinated, perfunctorily. Both were attacked by small-pox. The French army numbered 23,000 deaths by it, while the German army had only 278, and in the same tent breathing the same air, the French wounded were heavily visited by the disease, while the German wounded, having been vaccinated, had not a single case.

Medical News

Edited by H. Judson Lipes, M. D.

ALBANY GUILD FOR THE CARE OF THE SICK POOR; STATISTICS FOR JUNE, 1901.—Number of new cases, 71. *Classification of cases:* Dispensary patients receiving home care, 2; dental, 1; district cases reported by health physician, 13; charity cases reported by other physicians, 35; total number of charity cases, 51; moderate income cases, 20. *Classification of diseases:* Medical, 26; surgical, 14; gynecological (including 13 maternity cases), 19; dental, 1; skin, 9; throat and nose, 2. Number of contagious diseases in above list: Medical, 8; surgical, 1. Removed to hospitals, 3; died, 2. Cases were reported by the city physician, by four of the health physicians and by 17 other physicians.. *Visits of Guild nurses:* Number of visits with nursing treatment, 749; for professional supervision of convalescents, 306; total number of visits in June, 1,055.

Special Obstetrical Department: No reports filed in this department until cases have been dismissed. Patients under preliminary treatment not reported. One completed case in June; applied in April; confined June 2; dismissed June 16; obstetrician in charge, Dr. H. J. Lipes; number of calls, 8. Three students in attendance; number of calls, 10. One nurse in charge; number of visits, 14.

THE MEDICAL DEPARTMENT OF THE PAN-AMERICAN EXPOSITION.—Since the opening of the Pan-American Exposition on May 1st, the newspapers have been full of Pan-American news and descriptions, but to us one of the most important parts of the exposition has not been exploited to any great extent. The medical director, Dr. Roswell Park, has organized a most perfect hospital service, a handsome building has been erected and occupied and fully equipped. There are five doctors on duty, assisted by ten to twelve nurses. Emergency cases are taken to the hospital in an automobile ambulance, and after receiving first aid are transferred to one of the city hospitals, the cases being divided among the various institutions. The deputy medical director, Dr. Vertner Kenerson, has charge of the hospital work and Dr. Nelson W. Wilson is sanitary officer of the exposition.

This department is worthy of a visit, and no doubt a final report of the medical director will prove most interesting reading. Surgical operations of all kinds have been performed even to the removal of a spike from the foot of Big Liz, the Bostock elephant. Up to the present writing many thousand cases have been treated—indicating a large attendance at the fair.

Among the conveniences added to the hospital recently is a Fox Piper invalid bed, which is admirably adapted for lifting and changing the position of heavy patients and for easing the pain of those suffering from fracture, paralysis or other similar helpless conditions. An X-ray machine has been installed in Medical Director Park's office. The infant incubators are attracting a great deal of attention. A Filipino girl baby was born on the Midway June 18, 1901. This little girl is the first Filipino child born in this country. Dr. Coney of the baby incubators was called to the Indian Congress at 3:30 o'clock A. M., June 20th. An Indian baby had been prematurely born. The mother is Princess Ikishupau, an Apache. The baby weighs only two pounds, two ounces. It has been placed in an incubator, where it can be seen. The father is Chief Many Tales, also an Apache.

THE EXHIBIT OF THE UNITED STATES HOSPITAL CORPS: PAN-AMERICAN.—The United States Hospital Corps' camp, near the Government Building, is paved with broken stone, and is an exceedingly interesting exhibit, says the *Buffalo Medical Journal*. Dr. Edward L. Munson, captain and assistant surgeon U. S. army, is in command and there are 100 men under him. The camp consists of twenty-two tents. The hospital wards are composed of twelve "A" tents, set up in the form of a Geneva cross. There is a tropical ward, a winter ward and a summer ward. If the rest of the United States army was represented in proportion to the Hospital Corps there would be over 5,000 United States troops on the grounds. The Hospital Corps and equipment station at the exposition are such as is usually assigned to an army brigade, which contains 5,380 men.

THE RUDOLPH VIRCHOW MEMORIAL FUND.—Some months ago a committee consisting of Dr. Reed, president of the American Medical Association, Dr. Bowditch, president of the Congress of American Physicians

and Surgeons, Dr. Weir, president of the New York Academy of Medicine, Dr. Welch of Johns-Hopkins University, and Dr. A. Jacobi published an appeal to the American medical profession, requesting contributions to the Virchow fund which was established ten years ago in honor of Rudolph Virchow's seventieth birthday, which was reached October 13, 1891. The fund was created for the purpose of fostering biological, anthropological and general medical research. A large German committee, with national committees formed all over the globe, has undertaken to increase this fund in honor of the coming eightieth birthday of the great medical reformer.

Whatever contributions will be raised, should be sent to Germany on the first day of September in order to be received and acknowledged by the Central Committee in due time. As former notices may have been overlooked by such as are anxious to show their appreciation of the great master and to aid the cause represented by his life-long labors, we herewith repeat our appeal. Funds should be addressed to A. Jacobi, secretary, 110 West 34th street, New York.

NEW YORK STATE BOARD OF HEALTH CENSUS OF CONSUMPTION.—A census of the consumptives in this state has been begun by Dr. Daniel Lewis, state commissioner of health. It will be the first census of the kind ever undertaken in this State and will doubtless be of inestimable value. The census is for the purpose of ascertaining the number of consumptives in the State as far as possible and revealing other facts relating to the disease. It is expected that this enumeration will throw light on the question of what the State should do for the care of those within its borders who are afflicted with consumption and who cannot afford to pay for treatment at the private sanitarium.

It is expected that in the course of two years this census will be completed, when a second census will be taken. The results of these statistical tables will reveal to the commissioner of health and to the public whether consumption is on the increase or not as well as other valuable facts.

THE QUARTERLY JOURNAL OF INEBRIETY.—The July number of this journal will contain a symposium of the most authoritative scientific papers, recently read before medical societies in this country and Europe, on the physiological and pathological action of alcohol. These papers will contain the latest facts and conclusions on the action of alcohol as a beverage and medicine, and be of absorbing interest to every physician and person interested in this topic. Any one wishing this journal should address the editor, Dr. T. D. Crothers, Hartford, Conn., enclosing the price, seventy-five cents.

ANTHRAX OUTBREAK.—It is reported through State Agricultural Commissioner Wieting that there is an outbreak of anthrax in the vicinity of Oneida. There have been about thirty deaths of cattle and horses from this disease. Dr. William H. Kelley, the State veterinarian, assisted by

Prof. V. A. Moore, of the New York State Veterinary College, has used the Touissant method of preventative treatment on over one hundred heads and will use it on about two hundred more heads.

MEDICAL SOCIETY OF THE STATE ON NEW YORK: BUSINESS COMMITTEE—Dr. Henry L. Elsner, president of the Medical Society of the State of New York, has announced the appointment of the Business Committee for the ensuing year, consisting of Dr. Nathan Jacobson, chairman, 430 South Salina street, Syracuse; Dr. George Ryerson Fowler, 301 Dekalb avenue, Brooklyn, and Dr. William C. Krauss, 371 Delaware avenue, Buffalo. All letters and inquiries pertaining to papers and scientific communications for the semi-annual meeting, to be held in New York city, October 15 and 16, 1901, and the annual meeting, to be held in Albany January, 1902, should be addressed to the chairman.

PERSONAL.—Inadvertently the fraternity, of which the late Dr. Van Beusekom was a member, was given as the Phi Delta Theta. It should have been the Phi Gamma Delta.

—Dr. MINAS S. GREGORY (A. M. C., 1898), of Kings Park, N. Y., has been appointed junior physician at the Long Island State Hospital.

—Dr. CLAYTON K. HASKELL (A. M. C., 1901), has been appointed house physician at the Saratoga Hospital.

—Dr. FRED A. SMART (A. M. C., 1899), has moved from Carlisle, Schoharie county, N. Y., to 162 Nelson street, Atlanta, Ga.

—Dr. GARRETT W. TIMMERS (A. M. C., 1897), has removed to Castleton, Rensselaer county, N. Y.

MARRIED.—Dr. BURTON S. BOOTH (A. M. C., 1889), and Miss JESSIE A. SHAKLETON, of Troy, N. Y., June 30, 1901. Dr. and Mrs. Booth will spend three months in travel, and on their return will reside at 21 First street, Troy, N. Y.

—Dr. M. D. STEVENSON (A. M. C., 1884), and Miss FLORENCE S. CLEARY, at Albany, N. Y., June 19, 1901.

Book Reviews

The Technique of Surgical Gynecology. By AUGUSTIN H. GOELET, M. D., Professor of Gynecology in the New York School of Clinical Medicine, etc. *International Journal of Surgery Co.*, 100 William street, New York.

In a volume of 331 pages, containing 142 illustrations, the author discusses in more or less detail the technique of each of the more important operations of gynecological surgery. The ideas advanced seem to be for the most part the product of the author's personal experience.

The volume begins with chapters devoted to the preparation of the patient, the field of operation, the operator and assistants, and of the operating room, in which chapters the minor details are carefully considered. A questionable point in connection with the technique is the

suggestion that the assistants should always wear gloves, while the operator need not on all occasions.

Following the chapters on preparation are chapters devoted to curettage, trachelorrhaphy, perineorrhaphy, anterior colporrhaphy, vaginal cystotomy, closures of vesico-vaginal fistulæ and amputation of the cervix.

The technique of abdominal operations is next discussed and leads up to the chapters devoted to abdominal operations in gynecology.

Chapters are devoted to vaginal hysterectomy, vaginal myomectomy, removal of vermiform appendix, operation for ectopic gestation and nephropexy.

The volume ends with a discussion of accidents that may occur in the course of abdominal or vaginal operations, complications that may arise immediately after, or during convalescence and the after care of patients.

The illustrations are for the most part very satisfactory.

One feature, however, should be criticised, and that is the appearance of the maker's name upon various instruments and apparatus.

To one experienced in gynecological surgery the book will scarcely appeal, but the individual who does gynecological operations more or less infrequently, as well as the student of medicine will find in this volume much practical and useful information.

A. W. E.

Diseases of the Skin. A Practical Treatise on, for the Use of Students and Practitioners. By JAMES NEVINS HYDE, M. D., and FRANK HUGH MONTGOMERY, M. D. Sixth Edition. 1901. Lea Brothers & Co., Philadelphia.

The name of the principal author is a sufficient and suggestive commendation for any work on the subject, and Hyde has always been a leading and standard text-book. Its appreciation and success have fresh evidence in the issue of this edition hardly more than a year after the fifth. And it is fully deserving of its reputation, for it has always been a source of reliable information.

There is hardly a thing to criticise worth the mention, but the hope is ventured that with the next issue the first colored plate showing an extraordinary case of Naevus Lipomatodes, which appears as a frontispiece, will be left out, for it is suggested that what the average reader wants is illustration that is helpful for more commonplace matter. There is too often a disposition to show the unusual and perhaps pet instance of what has come under an author's personal observation. Most of the illustrative matter in this book is to a remarkable degree helpful. This is especially true of the monochrome plates, which far exceed in value much that is seen in the colored atlases on skin diseases. Plates 2 (erythema multiforme), 3 (herpetiform dermatitis) and 5 (pityriasis rubra pilaris), the last new in this edition, are good illustrations of the possibilities of this mode of exhibiting a skin disease pictorially. Color is usually artificial and misleading, though one new in this edition, of pityriasis rosea, is exceptionally worthy. The text bears evidence of much rewriting, as for instance the reference to the Finsen method of treatment of lupus, by subjecting the patch under pressure by a quartz lens to electric rays, which was ex-

hibited at the Dermatological Congress in 1900, and which is very highly commended. The book contains something over 800 pages and is compendious; for American practitioners it has no superior as an all-around book on the skin.

F. C. C.

International Clinics. A Quarterly of Clinical Lectures and Especially Prepared Articles on Medicine, Neurology, Surgery, Therapeutics, Obstetrics, Paediatrics, Pathology, Dermatology, Diseases of the Eye, Ear, Nose and Throat, and Other Topics of Interest to Students and Practitioners. By Leading Members of the Medical Profession Throughout the World. Edited by HENRY W. CATTELL, A. M., M. D., Philadelphia, U. S. A., with the collaboration of JOHN B. MURPHY, M. D., of Chicago; ALEXANDER D. BLACKADER, M. D., of Montreal; H. C. WOOD, M. D., of Philadelphia; T. M. ROTCH, M. D., of Boston; E. LANDOLT, M. D., of Paris; THOMAS G. MORTON, M. D., and CHARLES H. REED, M. D., of Philadelphia; J. W. BALLANTYNE, M. D., of Edinburgh, and JOHN HAROLD, M. D., of London, with regular correspondents in Montreal, London, Paris, Leipsic and Vienna. Volume I. Eleventh Series, 1901. Philadelphia: J. B. Lippincott Company. 1901.

Nine of the twenty articles in this volume consist of reports of clinics or clinical lectures by prominent men in Europe and America. Among other valuable papers, Dr. A. A. Stevens contributes some timely and conservative notes on new remedies. Dr. H. Botty Shaw presents a detailed study of one hundred cases of aortic aneurism from the records of the University College Hospital of London, of which forty-seven were examined post-mortem. Of these fatal cases thirteen were of the descending thoracic aorta, while only six were of the ascending aorta, but, from clinical evidence alone, aneurism seems more common in the ascending thoracic aorta and arch, as is generally stated. Alcoholism and strain were the most common factors in etiology. Dr. Herbert E. J. Biss contributes an article on "Scarlet Fever: Its Pathology, Varieties and Mode of Spread," in which he holds that the danger of infection from convalescents is because of the retention of the germ in the nose, ear or throat rather than in the skin. Even after these organs have become healthy a subsequent catarrh may result in the infection of others with scarlet fever. Dr. Charles A. Elsberg describes new methods of sterilizing catgut and sponges, which he claims are both simple and effective. Working on the principle that substances are insoluble in solutions of drugs which precipitate them from solution, he boils catgut in a saturated solution of ammonium sulphate and sponges in a solution containing two parts of tannic acid and one of caustic potash to one hundred parts of water. With preliminary and subsequent cleansing this procedure is said to give excellent results without injury to the material. Dr. A. Doleris reports twenty-five cases of labor in which he has injected cocaine into the lumbar arachnoid with complete analgesia in twenty-one cases and incomplete in four. He finds that the advantages of this method over chloroform are absolute freedom from pain, increase in uterine contractions

with more rapid labor, better retraction and decrease in loss of blood. In an article on "Some Practical Methods in Photomicrography," Mr. W. H. Walmsley has condensed much practical information into a comparatively short paper. There are numerous illustrations of the apparatus described and reproductions of excellent photomicrographs. In "Progress of Medicine During the Year 1900," Dr. N. J. Blackwood in one hundred and eight pages gives a résumé of the most important advances made in medicine during the past year.

R. G. C.

The International Medical Annual. A Year Book of Treatment and Practitioners' Index. By Thirty-Four Contributors. Nineteenth Year. New York: E. B. Treat & Co. 8vo. 624 Pages. \$3.00.

This annual volume enables one at a glance to see what progress has been made during the preceding year in medicine and the names of the contributors guarantee that the different fields of medical science have been well covered. The light treatment as developed by Finsen in its application to the diseases of the skin is thoroughly considered and the use of the X rays and their value fully discussed. Among the many subjects treated those relating to cancer, disorders of digestion, fractures, gonorrhea and phthisis deserve especial mention. There are several handsomely colored plates. The volume is exceedingly valuable as a work of ready reference.

Current Medical Literature

MEDICINE

Edited by Samuel B. Ward, M. D.

The Action of Coffee and Tea Upon the Respiration and Heart-Beat.
(*Die Wirkung des Destillats von Kaffee und Thee auf Athmung und Herz.*)

C. BINZ. *Centralblatt für innere Medizin*, November 24, 1900.

The writer experimented upon four students and also upon dogs in order to exclude the effect of suggestion. He used a carefully prepared distillate of coffee which was light yellow in color, clear, having a pleasant odor, weakly acid, and of a slightly bitter taste. The quantity employed was usually five drachms. Chemical examination showed that it was free from caffein. The results of his experiments were:

1. The distillate of roasted coffee, free from caffein, had an evident influence in increasing respiratory action.
2. It was especially evident when the determination was made after a short fast.
3. It was not of long duration.
4. It was due to an increase in frequency, not to an increase in each respiration.
5. Muscular activity and wild mental excitement were also evident.
6. The frequency of the pulse was not changed.

7. The distillate of good Chinese tea gave the same results but less marked.

8. The stimulating properties of the extract of the entire coffee or tea, and of the volatile substances in the vapor depends upon the caffeine, and this should be kept in mind when one compares the old and new investigations with each other.

Determination of the Action of Morphine on the Stomach. (Zur Kenntniss der Wirkung des Morphins auf den Magen.)

HIRSCH. *Centralblatt für innere Medizin*, January 12, 1901.

The writer made a number of experiments upon animals after having placed a canula in the duodenum four centimetres from the pylorus. He determined the time at which indifferent fluids passed out of the canula after entrance into the stomach, also the change which occurred after the injection of morphine. Rossbach, who made experiments with large doses of morphine, and then observed the condition by opening the abdominal cavity, reached similar results. The author draws the following conclusions:

1. Morphine in dose of .01 gram for each kilo of an animal produces a cessation for hours of the expulsion of the gastric contents.

2. This condition is due to a continuous contraction of the pylorus.

3. Strong peristaltic action of the pyloric portion in the full stomach, and weaker in an empty stomach, has also been observed while the fundus is at rest.

4. The secretion of hydrochloric acid is in the beginning diminished and later enormously increased.

5. The contraction of the pylorus and the peristalsis of the pyloric portion are due to an irritation of a contractile center in the corpora quadrigemina.

6. The diminution of the hydrochloric acid secretion at first is probably due to the excretion of the morphine by the gastric glands, while the later hypersecretion is of central origin. The results of the experiments upon animals can only, with care, be applied to human conditions. Leuberscher and Schäfer have, however, made similar experiments upon the insane, who are not the most suitable since they usually have a great tolerance for morphine. Riegel also has carried out the same experiments upon some of his patients. Their conclusions upon human subjects are:

(1.) The emptying of the stomach is markedly retarded.

(2.) The hydrochloric acid secretion is at first diminished, then later increased.

(3.) This action is more marked with larger doses.

The Action of Preparations of Thyroid in Some Rare Diseases. (Ueber die Wirkung der Thyreoidin Präparate by einigen seltenen Krankheitsfällen)

JAENICKE. *Centralblatt für innere Medizin*, 1901, No. 2.

The writer believes that the use of thyroid preparations has decreased, owing to bad results following their administration in many cases, and

because of the successful results of surgical procedures as advocated by Kocher and Mikulicz. The writer has noted the good effects following the use of thyroid in cases of glandular swelling in different parts of the body, pathological changes in the breast and spleen. He briefly reports a case of non-malignant tumor of the breast, one of lymphoma of the axillary glands and three cases of marked enlargement of the spleen without leucocytosis, which showed great improvement under this treatment. He places great stress upon the preparation of thyroid used, and from some has had no result whatsoever.

Death Due to Thymus. (Ein Beitrag zum Thymustod.)

PLOC. *Prager medicinische Wochenschrift*, 1900, Nos. 50 and 51.

Bayer, in 1885, reported two deaths due to chloroform narcosis. They both showed marked changes in the lymphatic system; one a lymph gland tuberculosis, the other a hyperplasia. Both deaths were due to syncope, and the sudden cessation of the heart's action was without warning. Paltauf, in 1889, wrote on the relation of the thymus to sudden deaths. He attributed the death to an anomalous constitutional condition of a lymphatic-chlorotic character, of which the enlargement of the thymus was but a part. In 1895 Kundrat claimed that such deaths were not due to chloroform, but to a sudden excitement of the heart or nervous system, which might be induced by other causes. Bayer again, in 1895, reported a third death from chloroform, in which there was a hyperplasia of the lymphatic system and an enlargement of the thymus. Wanitschek reports in 1899 a death during chloroform narcosis in a three-year-old girl with an enlarged thymus. The writer adds the death of a boy with a large thymus and lymphatic hyperplasia. He agrees with Nordmann, that death is due to the sudden compression of the large vessels and cardiac nerves by the turgescence of an enlarged thymus. A symptom of this condition which has been noted is a tremor of the muscles at the beginning and during the narcosis. To this condition he attributes many of the sudden deaths which have occurred without known cause.

The Relationship Between Diabetes Mellitus and Tabes Dorsalis. (Ueber die Beziehungen zwischen Diabetes Mellitus und Tabes Dorsualis.)

CRONER. *Zeitschrift für klinische Medicin. Band XLI, Heft 1-4.*

Tabes and diabetes have so many symptoms in common that a mistake is easy at first sight. Althaus first pointed out this resemblance, the general weakness in the beginning of both diseases, the different forms of paralysis, the uncertainty in walk, especially in the dark, the areas of anæsthesia or analgesia, and the paræsthesiæ. Patients with either disease have a susceptibility to cold and complain of a similar sensation on walking. The diabetic neuralgias often simulate the lightning pains, while loss of sexual feeling, trophic and secretory disturbances are common to both. Althaus believed that the knee and pupil reflexes make clear the diagnosis. It has, however, been shown that the absence of the knee reflex is a common phenomenon in diabetes. Nivière found it absent 89

times in 210 cases; Grube in 7.8 per cent. of his cases. This condition was attributed to a diabetic neuritis, but in a number of cases recently degeneration in the posterior columns has been found.

It is to be remembered that there are families in which some of the members suffer from diabetes and others from tabes, and cases of diabetes are reported which, as a result of, or at least after an injury, developed disease of the cord. The occurrence, too, of tabes and diabetes insipidus is not so uncommon, and the writer has seen this association six times in the last six years in his service in Charité polyclinic. It is an undoubted fact that arterial sclerosis is a cause of diabetes, and that lues is the principal cause of arterial sclerosis.

Disease of the pancreas with consecutive diabetes can be explained in this way—diffuse interstitial pancreatitis with general arterio-sclerosis. Diabetes may be a complication of tabes from extension of the tabetic process to the vagus nucleus.

OBSTETRICS AND GYNECOLOGY

Edited by James P. Boyd, M. D.

A Contribution to the Treatment of Rupture of the Uterus. (Ein Beitrag zur Therapie der Uterusruptur.)

H. SCHMIT. *Monatsschrift für Geburtshülfe und Gynäkologie*, Band XII, September, 1900.

The cases of uterine rupture observed in Schauta's clinic from October, 1891, to March, 1900, are considered. While observers are generally agreed with reference to the method of delivery, there is considerable difference of opinion as to the after-treatment of cases which have been delivered *per vaginam*. As to delivery, the general rule is to deliver by the quickest method, and that which is least injurious to the maternal structures, i. e., if the fetus is still in utero, to deliver *per vaginam*, embryotomy being necessary in some cases; if the fetus has completely escaped into the abdominal cavity, to deliver by laparotomy. As to the after-treatment of cases delivered *per vaginam*, the question of operative vs. conservative treatment is of primary importance. In examining the recent literature of the subject, one is almost forced to the conclusion that the operative treatment is gaining ground in spite of the fact that experienced authorities favor a conservative course. This is probably due to the well-known fact that the successful cases by operative treatment are more frequently reported than unsuccessful ones. Schmit reports nineteen cases. Seven of the nine cases of incomplete rupture were treated by drainage. One received no special treatment, since the rupture was not clinically recognizable, and one case died from effects of hæmorrhage before laparotomy could be undertaken. Of the seven cases treated by drainage, two died, a mortality of twenty-eight and fifty-seven hundredths per cent. There were ten cases of complete rupture, four treated by operation, six by drainage; mortality fifty per cent. in both operative and non-operative cases. Altogether the mortality of cases treated operatively was fifty per cent., in those treated by drainage, thirty-eight and forty-

six hundredths per cent. By the study of the results obtained in a continuous series of cases, in various clinics, (179 cases in all) it was obvious that drainage gives far better results than operative treatment. Of the patients treated by drainage, fifty-one and eight tenths per cent. recovered; of those operated upon, only twenty-five per cent. The reasons for this greater mortality in operated cases are that it was in the severe cases in which operative treatment was practiced, cases in which the child had escaped into the abdominal cavity being especially dangerous. Another reason is to be found in the greater liability to infection. It was formerly supposed that the principal sources of danger in uterine rupture were hæmorrhage and shock, but it is now generally recognized that sepsis constitutes the greater source of danger. In conclusion, Schmit states that except in those cases in which severe hæmorrhage or extensive lacerations make operative treatment imperative, better results will be obtained by conservative treatment—drainage in particular.

The Vascular and Nervous Anatomy and Physiology of the Bladder.
(*Anatomie et physiologie vasculaire et nerveuse de la vessie.*)

J. H. KEIFFER. *La Gynécologie*, August 15, 1900.

There is shown by means of numerous micro-photographs and drawings, the relative arrangement of the vessels, nerves and muscles of the bladder. Extreme vascularization was noted particularly in the mucous coat situated at the so-called neck of the bladder. The simple inspection of the preparations, notably of the region of the neck, suggested the theory that a cavity, such as that of the bladder, reduced to a mere slit at the level of the neck, closed by a mucous membrane so richly vascular, would necessarily be influenced in its capacity and in its form by nothing less than the modification occurring in the caliber of the vessels. It seems at first sight, that a simple vaso-dilatation, or vaso-constriction, was able, by itself alone, without the intervention of the bladder muscle, to produce the opening or closing of the urinary reservoir. If one considers that simple emotion, cold or heat, is sufficient to excite or provoke micturition, one rightly supposes that under such conditions it is the vaso-motor innervation which is of primary influence, and that these excitations involve at first sympathetic vascular phenomena, and secondarily muscular action. In résumé: Since the anatomical examination of the vesical neck as regards its vascularity, coincides with that which we know of the general and physiological vaso-motor phenomena, we are then able to believe that in the series of acts that constitute micturition, the dilatation and the constriction of the vessels of the mucous coat of the bladder neck plays a role of considerable importance. The determination of this role and the time of its appearance would seem to be difficult to find by the experimental manometrical researches, or by the section of the sympathetic and sacral nerves, or their excitation. In fact, the results would not be exclusively vascular, nor exclusively muscular, and therefore it would not be possible to show the part of intervention of the vessels in the phenomena. Perhaps one would be able to appreciate the disassociation of

the physiological acts by the simple anæmia or congestion of the cervical region. That which especially supports this view is the presence in the bladder of nerve ganglions and of a rich nerve plexus. What is, in fact, the principal relation of these sympathetic nervous elements? Is it not above all, with the vessels of the muscular layer, to the situation of the vessels, that the cells and nervous plexus owe their disposition, as well as their structure? But from all the anatomical points of the bladder, it is the cervical region which is the richest in vessels; it is then extraordinarily rich in multipolar nerve cells. This mucous coat may then be considered as most highly sensitive to the vaso-motor reactions, of being the point of departure and arrival of sensitive acts, as also of motor acts for the bladder muscle and for the voluntary striated muscle fibres which surround it.

Pregnancy and the Modifications of Nutrition. (Gravidouza e modificazioni della nutrizione.)

CHARRIN AND GUILLEMNAT. *Gazet. degli ospedal e delle Cliniche*, July 3, 1900.

There is a diminution of oxygen consumed or of the carbonic dioxide given off; the carbohydrates and the fats are consumed but sparingly.

The authors have made a series of experiments for the purpose of finding a means of stimulating this activity. They injected ovarian juice from the lower animals into other pregnant animals with the result that the urea was increased. When given in doses of twelve to fifteen cubic centimeters, abortion followed. Several groups of pregnant females were subjected to the same treatment, the one group receiving simply the excipient; namely, salt water or glycerine and water; the others receiving the excipient together with extract of the liver, or of the kidney, or of muscle; but in these controlled animals the urine did not show any noticeable change. In both classes the variations of the phosphates, the relation of nitrogen and of urea to the total nitrogen did not seem to have any importance. It seems from this that in the gravid female the ovarian extract provokes an augmentation of metabolism.

W. H. H.

Changes in the Arterial Tension after Gynecological Operations. (Ueber Blutdruckschwankungen nach gynäkologischen Operationen.)

H. SCHRÖDER. *Centralblatt für Gynäkologie*, No. 40, 1900.

Investigations on the condition of the blood pressure before and after gynecological operations were made by the author. He employed the Gärtner tonometer with most satisfactory results. Under the same conditions the blood pressure was constant in the same individual. Arteriosclerosis, nephritis and hysteria were accompanied by high tension.

He found that any weakness of the heart caused a sinking of the arterial pressure which could be measured on the tonometer. The tension of the patients was taken for several days before the operation, immediately after, a number of times on the operation day and night and morning after-

wards. Patients in the hospital for observation who were anæsthetized but not operated upon showed little variation in the tension. In the operated cases there was a marked fall right after the operation followed by a gradual increase for a number of days and then a fall to about the same as before the operation. After severe and protracted operations the fall was very marked. In an hour or two it would rise and reach the highest point the next evening or the following day. It falls again during the second week, remains low for a few days and then slowly rises with some remissions. In this way he was able to plot out a number of tension curves. Where the operation was light the single phases of the curve were closer together and the duration shorter.

After chloroform asphyxia the tension rose very slowly after the operation. After operations attended with much loss of blood or collapse the tension would sometimes rise after the operation followed by a rapid fall and it would remain low until the exitus. The curve after vaginal operations was similar only, the fall directly after the operation was not so great and the following rise not so high or long continued as after laparotomies. The author explains the fall after the operation as due to the chloroform.

BACTERIOLOGY AND HYGIENE.

Edited by A. J. Lartigau, M. D.

The Action of Liquid Air Upon Bacteria. (Ueber Einwirkung flüssiger Luft auf Bakteria.)

J. MEYER. *Centralblatt für Bakteriologie*, Bd. XXVIII, No. 18.

Meyer refers to the numerous investigations regarding the effect of zero temperatures on bacteria. According to most authors, the effect is purely an inhibitive one. He refers to the experiments of A. C. White and Macfadyen with liquid air. White claimed that pure cultures of bacteria were not killed by exposure to the action of liquid air. Macfadyen found that liquid air acting on bacteria even as long as a week failed to kill them. The author tried the effect of liquid air on anthrax spores, and on the staphylococcus pyogenes aureus. He exposed the organisms to the air in the form of a spray, or else put liquid air right on the culture, or put the test tubes in liquid air. The time of exposure varied from five seconds to fifteen minutes. In no instance did he find death of the bacteria, in fact, not even a loss of any of their properties resulted. He proposes to publish experiments later bearing on the action of liquid air on bacteria in inflamed tissue.

The Propagation of Tuberculosis by Means of Milk and Milk Products. (Die Übertragung der Tuberkulose durch Milch und Milchprodukte.)

R. MILCHNER. *Zeitschrift für Tuberkulose und Heilstättenwesen*, Bd. I, Heft 5.

In this article Milchner reviews the whole subject of the infection of milk and milk products with the tubercle bacilli, and also reviews the question as to how frequently intestinal tuberculosis can be directly traced

to infection with such foods. He goes over the literature, referring to tubercle bacilli in milk, cream, butter and cheese, and shows that notwithstanding certain adverse statements, the majority of authors are agreed that in a moderate percentage of samples of market milk, butter, cream and cheese, virulent tubercle bacilli are present.

With regard to the evidence that tuberculosis follows the ingestion of these products, he states that but few satisfactory cases are recorded. There is a difficulty in deciding as to whether material of this sort gives rise to tuberculosis or not, inasmuch as the symptoms appear some time after the ingestion of food, and the disease lasts a long time, and at autopsy other tuberculous lesions are often present, so that it may be almost impossible to determine what was the primary focus, and whether other factors than food stuffs may not come into account.

He cites one or two undoubted well-known cases of intestinal tuberculosis in children due to infected milk, in which the cow or cows giving the milk were examined and found to be tuberculous. He remarked on the infrequency of primary intestinal tuberculosis, and suggests that this is due to the fact that many times the bacilli pass through the intestinal walls, leaving these unchanged, and attack the mesenteric glands.

In support of this latter view, he cites the statistics of Kossel, who found six per cent. of children dying in the first year of life tuberculous, and thirty-six per cent. of those dying in the following nine years of life. In twenty-seven per cent. of these last named cases, there was a latent tuberculosis of the mesenteric lymph glands. The author explains the disparity in mortality from tuberculosis between the first year of life and the succeeding nine years on the grounds that during the first year the children are usually fed on breast milk, or else on milk which has been sterilized, so that it is not until after the first year that they drink the raw, contaminated milk.

The author concludes as a result of his researches, that tuberculous infection through the alimentary canal, is more common than is generally supposed, and has been very often overlooked because it was supposed that the intestines would naturally be the primary seat of disease, whereas, as a matter of fact, the disease frequently skips the intestines and attacks first the mesenteric lymph glands.

Concerning the Rôle of Bacteria in the Intestine. (Du rôle der bactéries de l'intestin.)

BIENSTOCK. *Annales de l'institut Pasteur, Tome XIV, No. 11.*

This paper is devoted to a discussion concerning the intestinal bacteria, and especially concerning the mechanism by which anærobic putrefactive bacteria are destroyed. The author refers to a previous work on the bacillus putrificus, an anærobic putrefactive organism, which he isolated from the intestine. He, first of all, comments upon the process of putrefaction upon sterile and non-sterile food, taking milk as an example. He shows that his bacillus putrificus causes rapid decomposition in sterile milk or pasteurized milk, while it does not do so in ordinary crude milk. He endeavors to explain this by the fact that certain bacteria are commonly found in crude milk, which have a destructive

action upon certain putrefactive organisms, and which, therefore, inhibit putrefaction. He found that by adding a small quantity of drinking water to sterilized milk, he could prevent its putrefaction. He considers that the absence of excessive putrefactive processes in the intestine can be explained on grounds similar to those which he brings forward to account for the lack of putrefaction in crude milk, namely, that the anærobic putrefactive bacteria are destroyed, or at any rate inhibited in their action by certain ærobic bacteria. As a result of his observations, he comes to the conclusion that the bacillus coli communis and the bacillus lactis ærogenes are the organisms which inhibit and ultimately destroy the anærobes of the intestine.

Concerning Smegma Bacilli. (Zur Kenntniss der Smegmabacillen.)

C. FRÄNKEL. *Centralblatt für Bakteriologie*, Bd. XXIX, No. 1.

Fränkel goes over the literature relating to the different attempts which have been made to cultivate these bacilli, and refers particularly to the claims made by Dontrelepont and Laser and Czaplewski, who claimed to have grown them.

He himself tried to grow them on some of the new media devised for the growth of tubercle bacilli, such as Nährstoff Heyden. As a result of his experiments, he concludes that the smegma contains more than one variety of organism which stains like, and may be mistaken for, the tubercle bacillus. The form which most closely resembles the tubercle in its morphology and tinctorial reactions he was never able to grow on any artificial medium, and he thinks that Laser and the other observers mentioned did not cultivate this either. He describes an organism which he frequently isolated out of smegma, and which he thinks Laser and Czaplewski also isolated. It is an organism which looks like the diphtheria bacillus. After artificial cultivation it loses its power to resist acids, and no longer stains like the tubercle bacillus. He thinks that the organism should be classed as a form of pseudo-diphtheria bacillus, and distinguished from the smegma bacilli, which constantly look and stain like tubercle bacilli.

The Tuberculosis Mortality of Hamburg in the Years 1820 to 1899. (Die Tuberkulose-Sterblichkeit Hamburgs in den Jahren 1820 bis 1899).

G. HERMANN SIEVEKING. *Zeitschrift für Tuberkulose und Heilstättenwesen*, Band, 1, Heft 4, 1900.

In this article Sieveking gives a very interesting review of the tuberculosis mortality in Hamburg covering the years 1820 to 1899. He states that careful statistics have been kept in that city during this time. He divides his study into several subheads. He takes up first the general mortality from tuberculosis of the lungs, and shows that it has decreased steadily from 1830 to 1899. From 1820 to 1830 there was a slight increase. The highest point reached in 1830 showed a mortality of 7.5 deaths per 1,000 living, whilst in 1898 the mortality was slightly under two deaths per 1,000 living. He next compares the mortality of the town of Hamburg with that of the surrounding country, and shows that the country has always had a lower mortality than the city, though the decrease in mortality has

not been so marked there as in the city itself. Taking up the subject of the mortality in the two sexes he shows that in the last five years, covering which time he had especially good statistics, to every 100 women who died of pulmonary tuberculosis 155 men died of the same disease, whilst to every 100 women who died of other forms of tuberculosis, 123 men died. A study of the mortality according to months show that the highest mortality is found in March and April and the lowest in September. The male and female sex react the same in this connection. With his chart showing the relation of season to mortality he gives a curve indicating the temperature. This is almost exactly an inverse of the curve of mortality, and shows that when the temperature is lowest the mortality is highest, and *vice versa*. With regard to the age incidence of the disease the author shows two curves; one for men and one for women. The curve for men reaches about two and a half per thousand living during the first year of life. There is then a drop to below one death per thousand living, which lasts until about the twelfth year. The mortality then steadily increases through the second, third and fourth decades, and in males the highest mortality is reached between the fortieth and fiftieth years. It remains about the same until the seventieth year, when a rapid drop takes place. The mortality at the highest point is a little over six deaths per thousand living. In females an almost exactly similar curve is produced, except that the highest mortality is reached earlier, from thirty to thirty-five or forty, and after forty the drop in mortality immediately begins. The author finally reviews the relation of occupation to tuberculosis. Of the common occupations he gives the lowest mortality to the butcher, and the highest to the worker in tobacco and the cloth maker.

Contribution to the Etiology of Botulismus. (Ein Beitrag zur Ätiologie des Botulismus.)

P. RÖMER, *Centralblatt für Bakteriologie, Band XXVII, No. 25.*

Römer calls attention to the fact that a number of years ago van Ermen-gem described an organism which he named the Bacillus Botulinus, which he had isolated from meat, which had given rise to an epidemic of the form of meat poisoning known as "botulismus."

Römer examined some ham which had given rise in three or four individuals who ate it to dryness of the mouth, paralysis of some of the eye muscles and gastro-intestinal symptoms. He found in the ham here and there in the substance of the meat little areas which were of a bluish-gray color, moist and softer than the surrounding ham. They gave off a peculiar smell like butyric acid. The author was able to cultivate from such portions of the ham a bacillus which corresponded with van Ermengem's bacillus botulinus in every way. The bacillus was not in pure culture but was isolated with other organisms. Römer thinks that the presence of these other organisms was necessary to the life of the bacillus as it was an anærobic organism and the accompanying organisms were ærobic, so that they removed the oxygen from the tissues and enabled the anærobic organism to get a foothold.

OPHTHALMOLOGY

Edited by C. M. Culver, M. D.

*Validol in Scotoma Scintillans.*NEUSTAETTER, (Munich). *Die ophthalmologische Klinik*, 20 June, 1900.

The author's contribution of this article was prompted by the very beneficial results obtained, in five cases of scotoma scintillans, by the exhibition of doses of twenty drops of validol. At first the patient noticed no effect of the taking of the alleged remedy; after a few minutes, however, the irregular lines became less conspicuous, then disappeared very suddenly and did not reappear. After a few more minutes the visual field was entirely clear. Subsequent attacks were relieved with equal promptness and in only one case was the taking of a second dose necessary.

The second case was benefited, but disappeared from observation and no further history of the case was obtainable. The third and fourth cases were practically the same as the first, as to the morbid condition and its prompt relief by the use of validol. The fifth case was that of a man much addicted to the abuse of alcohol. The author thinks that fact caused a partial nullification of the effect of the validol. The article under consideration does not state whether the menthol in the drug is to be credited with any part of its good effect. Validol is of pleasanter taste than is menthol, is oleaginous, smells somewhat like ether and has a decidedly agreeable taste when taken on a lump of sugar, which, by the way, is the proper method for taking it. Neustaetter holds that it should always be used in cases of scotoma scintillans, for it not only removes the scotoma, but also relieves the headache and, so far as is yet known, is a harmless product.

*Recurrent Paralysis of the Oculomotor Nerve.*J. W. STIRLING. *Ophthalmic Review*, April, 1900.

The author's patient was a girl, aged fourteen years, who was first seen on May 12, 1899; she had the following history: Four days previously she had had a severe bilious headache with vomiting, and this was rapidly followed by diplopia and ptosis on the right side. The headache was on the right side and lasted for three days. She had had a somewhat similar attack three months earlier, the symptoms disappearing in a week; as well as one two years before that, with diplopia; this had followed diphtheria. All her life she had been subject to sick headache, and her left eye had been defective, in accommodation, for several years. The child had had no serious illnesses, but her mother was a lunatic.

The present state is as follows: All the muscles supplied by the third nerve are paralyzed except the sphincter iridis. The left vision is five-ninths. Pupil sluggish and widely dilated. With convex, spheric 5.0 D, Jaeger's No. 1 can be read. Peripheral contraction of the field exists. The visual acuity of the right eye is five-ninths of the normal. The eye is healthy in every respect. June 21st, slight paresis of left internal rectus. No ptosis. Its pupil reacts badly to light and not at all on accommodation, and this condition of pupil was present three weeks later. On August 21st, another slight attack of pain with diplopia developed, but there was no ptosis. These cases are rare, only about sixty having been described.

As most of them are due to some organic lesion of the nerve trunk, the author thinks that this is likely to be the case here, but this has not been verified.

TABLE OF OPERATIONS IN THE SURGICAL AND ALLIED DIVISIONS OF THE
ALBANY HOSPITAL, FROM JUNE 1, 1900, TO MAY 31, 1901.

COMPILED BY W. G. MACDONALD, M. D.

HEAD		Cesophagotomy	1
<i>Scalp</i>		Excision, carcinomata.....	4
Suture of lacerated wounds.....		Excision, lipomata.....	3
Removal of bullets.....		Excision, sebaceous cystomata....	7
Removal of other foreign bodies..		Excision, branchial cysts.....	3
Excision, sebaceous cysts.....		Excision, tubercular glands.....	13
<i>Skull</i>		Excision, spinal accessory nerve..	1
Trepanation		Incisions, furuncle.....	3
Operations, mastoid.....		Tracheotomy	1
Removal Gasserian ganglion.....		<i>Thorax</i>	
<i>Face</i>		Resection of ribs, empyæma.....	3
Excision, epitheliomata.....		Resection of ribs, typhoid.....	2
Excision, sebaceous cystomata....		Aspiration of pleuræ.....	3
Excision, inferior orbital nerve		Removal of bullet.....	1
and ganglion.....		Excision, sebaceous cystomata....	4
Excision, inferior dental nerve...		AXILLA	
Excision, Antrum Highmore.....		Excision of sarcomata.....	1
Operation for necrosis, inferior		Excision of carcinomata.....	2
maxillary		Excision of tubercular glands....	3
Wiring inferior maxillary.....		BREAST	
Incisions for cellulitis.....		Amputations for carcinomata....	33
Operations, plastic.....		Amputations for sarcomata.....	4
Operations for nævus.....		Excision of adenomata.....	4
Rhinoplasty, partial.....		Excision of cystomata.....	2
Operation for deviated septum...		VERTEBRAL REGION	
Operation, empyæma, frontal sinus		Laminectomy	2
<i>MOUTH</i>		Operations for psoas abscess....	10
<i>Tongue</i>		Excision, carcinomata of back....	2
Excision, carcinomata.....		Excision, dermoid cystomata and	
Excision, alveolar sarcomata.....		fistulæ from sacral region.....	6
Excision, necrosis.....		Excision, coccyx.....	3
Excision, epitheliomata of lip....		Operation, necrosis of sacrum....	1
Excision, cystoma of lip.....		Operation, sarcoma of sacrum....	1
Operations for hair lip.....		ABDOMEN	
Operations for cleft palate.....		<i>Abdominal wall</i>	
<i>NECK</i>		Sarcoma excision.....	2
Thyroidectomy			

Peritoneum

Peritonitis, general irritation and drainage	16
Peritonitis, tubercular.....	5
Actinomycosis, exploration.....	1
Cancer, general of peritoneum, exploration	1
Sarcoma, general of peritoneum, exploration	1
Exploratory abdominal sections...	6

STOMACH

Exploratory incisions in cancer...	4
Gastrectomy, partial.....	1
Gastro-enterotomy.....	4
Pyloroplasty, Mikulicz Heincke..	2
Gunshot wound.....	1

SMALL INTESTINES

Duodeno-jejunostomy	4
Intestinal resection.....	6
Intestinal perforation, typhoid, suture	1
Intestinal perforation, gunshot wound, suture.....	1
Intestinal obstruction, operations for	6
Enterotomies	4
Resection of cæcum.....	2
Carcinomata of cæcum, exploratory	2

LARGE INTESTINES

Colotomies, left inguinal.....	7
Appendicitis, acute.....	37
Appendicitis, relapsing.....	71

RECTUM, ANUS AND PERINEUM

Hemorrhoids, ligations.....	37
Hemorrhoids, Whitehead's operation	12
Fistula in ano.....	12
Abscess, ischiorectal.....	4
Resection for carcinomata of rectum	1
Resection for stricture of rectum..	1
Divulsion for stricture of rectum..	2
Divulsion for fissure of anus.....	2
Cauterization, ulcers of rectum...	2

HERNIAS, OPERATIONS FOR CURE

Umbilical and ventral.....	7
Femoral	6
Inguinal	32
Diaphragmatic	1

LIVER, GALL BLADDER, BILE DUCTS

Liver, excision partial for angioma	1
Liver, suture of floating lobe.....	1
Liver, abscess, drainage.....	1
Liver, tubercular? Exploration...	1
Cholecystotomies	9
Cholecystectomies for cancer.....	1
Gunshot	1
Inflammatory	1
Choledochotomy	1

PANCREAS

Chronic pancreatitis, exploratory.	1
Carcinoma of pancreas.....	2

GENERATIVE ORGANS

Uterus and ligaments

Hysterectomy, abdominal, complete	6
Hysterectomy, supra-vaginal.....	61
Hysterotomy, (myomectomy)....	6
Hysterectomy, vaginal.....	38
Hysterorrhaphy (ventral fixation).14	
Shortening round ligaments, intra-abdominal	2
Excision of round ligament for myoma	1

Uterine appendages

Salpingo-oöphorectomy, (double inflammatory)	27
Salpingo - oöphorectomy, (single inflammatory)	88
Salpingo-oöphorectomy, (tubercular)	5

Tumors of ovary

Ovarian cyst, (multilocular) excision	15
Ovarian cyst, (dermoid), excision	7
Ovarian cyst, (papillomatous), excision	3

Cyst of broad ligaments, excision	2
Carcinomata of ovary, excision...	2
Sarcoma of ovary, excision.....	1
Papillomata of ovary, double, excision.....	1
Extra-uterine pregnancy.....	9

Cervix uteri

Dilatation and curettage	137
Trachelorrhaphy	44
Extirpation, uterine polypus.....	6
Amputation of cervix uteri.....	8
Amputation of cervix uteri, and cauterization in inoperable cancer, vagina, vulva and perineum.	3
Colporrhaphy, (anterior).....	19
Perineorrhaphy, (Emmets).....	34
Vesico-vaginal fistulæ, closure....	3
Vesico-uretero-vaginal fistulæ, closure.....	1

Tumors of vagina and vulva

Carcinomata, excision.....	4
Papillomata, excision.....	3
Cyst	1
Abscess	1
Vaginal puncture in pelvic abscess	6
Vaginal septum, excision.....	1
Clitoridectomy	1

GENITO-URINARY

Kidney

Nephrectomies, abdominal.....	3
Nephrectomies, lumbar.....	4
Nephrotomies	4
Nephorrhaphies	5

Bladder

Suture for rupture of bladder....	1
Tuberculosis, perineal section drainage	3
Exploration, perineal cancer.....	2
Exploration, supra-pubic, cancer..	1
Lithotomy, perineal.....	3
Lithotomy, vaginal.....	1
Lithotomy, supra-pubic.....	2

Prostate

Operation, Bottini's, (hypertrophy)	5
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Urethra

External urethrotomy.....	7
Internal urethrotomy.....	13
Divulsion for stricture.....	12

Testes and scrotum

Castrations	4
Ligation of varicocele.....	12
Radical cure of hydrocele.....	10
Incision, scrotal abscess.....	3
Excision, sebaceous cyst.....	1

Penis

Amputations	5
Phimosis	32

UPPER EXTREMITIES

Shoulder

Amputation with scapula and clavicle	1
Amputation	1
Resections	2
Arthrotomy	2
Excision of lipoma.....	1
Excision of sebaceous cyst.....	1
Removal of bullet.....	1

Arm

Amputations	4
Operation for necrosis.....	2
Operation for wiring humerus....	1
Excision, sarcoma.....	1
Suture musculo-spiral nerve.....	1

Elbow

Excisions	3
Excisions, partial.....	1

Forearm

Amputations	4
Ligations of radial artery.....	4
Suture of lacerated wound.....	2
Operation for necrosis, ulna.....	1
Suture of tendons.....	3
Suture of median nerve.....	1
Incisions for cellulitis.....	3
Osteotomy of radius.....	1
Excision of ganglia.....	2

Hand

Amputations 2
Amputations, partial.....19
Removal of neuroma..... 1
Removal of foreign bodies..... 7
Removal of bullets..... 2
Excision of cancer..... 1
Operation for necrosis..... 1
Operation for contractions..... 4
Incisions in cellulitis..... 5
Suture of tendons..... 2
Suture of wounds..... 7

LOWER EXTREMITIES

Hip: Inguinal region

Amputations 1
Resections 4
Resections, partial..... 2
Incision of abscesses..... 2
Excision of carcinoma of inguinal glands 2
Excision of tubercular inguinal glands 7

Thigh

Amputations12
Osteotomies 2
Operations for osteomyelitis..... 2
Excision, sarcoma..... 2
Excision, lipoma..... 1
Wiring in ununited fractures..... 2

Knee

Amputations 2
Resection 1
Resection, partial..... 3
Aspiration of joint..... 3
Wiring patella for fracture 4
Removal of floating cartilage..... 2
Operation, ankylosis..... 3

Leg

Amputations 7
Operations for necrosis..... 8
Operations, wiring un-united fractures of tibia and fibula..... 5
Ligations, multiple, varicose veins. 9

Excision of sarcomata..... 1
Excision of carcinomata..... 1
Excision of lipomata..... 2
Incisions, multiple in cellulitis.... 4
Osteoclasis for rachitic deformities 2
Removal of bullet..... 1

Ankle

Excision, partial..... 1

Foot

Amputations 8
Operations for necrosis..... 4
Operations for bunion..... 4
Operations for ingrown nails..... 3
Operation for perforating ulcer... 1
Operation for neuroma..... 1
Operations for cellulitis.....11
Removal of bullet..... 1

DEFORMITIES

Tenotomies, multiple.....16
Phelps' operation for talipes equino-varus2

NOTE—Complications in operations for gynecological cases, but tabulated elsewhere in table, viz:

Appendicitis, (cases) excision...25
Cholecystotomy for gall stones.... 1
Floating right lobe of liver, suture 1
Colotomy for carcinoma of sigmoid 2
Hemorrhoids, excision.....23
Psoas abscess..... 1

EYE

Cataract19
Needling 3
Iridectomy20
Paracentesis, of cornea..... 1
Enucleations17
Strabismus..... 1
Foreign body exploration 1
Grattage, 1
Lacerated cornea..... 2
Entropion 1

ALBANY MEDICAL ANNALS

Original Communications

ADDRESS TO THE GRADUATING CLASS OF THE ALBANY HOSPITAL TRAINING SCHOOL FOR NURSES.*

By SAMUEL B. WARD, M. D.,

Professor of Theory and Practice of Medicine and of Hygiene, Albany Medical College.

Ladies of the Graduating Class:

Three years have gone by since you set before yourselves the task which we are here to-night to see you complete. No doubt there have been occasions when some of you have been affected by those you were caring for, as Job was by Eliphaz, the Temanite, when he remarked of him "But now he hath made me weary;" but nevertheless you have persisted, have conquered the obstacles that beset your path and are about to receive the diploma which certifies to the world that you are competent to take care of the sick.

To take care of the sick—to relieve pain and ease suffering—in some cases it must be to smooth the pillow of the dying and rob the arch-enemy of half his terrors—in most cases, fortunately to aid in hastening recovery and restoring the invalid to health, happiness and usefulness—such is the life work you have chosen. Certainly no argument can be necessary to prove the nobility of

*Delivered at the commencement exercises of the Second Class of the Training School, May 15, 1901.

such a calling and no words of mine can adequately set forth the responsibility you assume. Unless each of you feels this for herself words are idle.

The experience you have already had with the sick during your student-life must have shown you some of the difficulties with which you will have to contend. The hours of work are often long; the nights seem sometimes as if they would never end; and the tax on your powers of physical endurance will at times be very exhausting.

Moreover it is a part of many forms of illness to render the patient fretful, nervous, exacting and unreasonable, even though in health he or she may be most cheerful and considerate. To meet the requirements of such cases, to temper firmness with kindness and conciliation; to learn when to insist and when to coax; to learn how to bear, without showing that your temper is ruffled, unjust accusations and unreasonable demands—all this will tax your ingenuity, your forbearance and your self-control almost beyond the limit. Much of this you have already doubtless seen; but you will find that in your calling, as in mine, no two cases are alike; that each year and each month will show some new phase of sickness, and of human nature during illness, each of which must be met with patience and consideration. We are all to a wonderful degree creatures of habit—the saying is trite; but it is just as true as it is trite. And the fortunate part of it is that good habits become a part of the make-up of some people just as much as bad habits do of others. This is a view of the subject on which too little stress is sometimes laid. No doubt some of you may have found it difficult at first to refrain from making a sharp reply in words to some unjust criticism of which you have been the subject. But I trust that you have all now come to understand that such unreasonable criticism is just as much a part of the illness as is the rapid pulse—that you would be quite as well justified in getting angry at the patient's having a temperature of 105° as at her making some querulous remark. "A soft answer turneth away wrath," and you have doubtless found that the habit of making such grows upon you—that with the habit acquired the effort becomes notably less.

Remember, moreover, that the simple doing what is asked of you is not always all that is necessary. You must do it cheerfully. I have seen nurses—on rare occasions it is true, but I have seen

them—comply with the request of a patient with a toss of the head, a jerk of the hand, and a facial expression, such that they might just about as well have refused to comply at all. Such conduct does not pay in the long run. It may during the continuance of a given case save you a few steps and some little trouble and annoyance; but you may be sure that the reputation which this patient gives you will follow you for a long time and you will be entirely relieved of the trouble of serving her again or any of her friends or acquaintances. But aside from the question of whether it pays pecuniarily or not, such conduct is not being true to yourselves—is incompatible with the maintenance of your own dignity and self-respect.

It is true that a reputation for ability, education and training go a great way in getting employment for you, in giving you an opportunity to be useful. But there are few relations in life in which the personal equation comes in more strongly than in yours; and I think that most professional nurses would be surprised to know how thoroughly and frankly their personal peculiarities are discussed and commented on by patients whom they have cared for—how their reputation goes from one patient to another. You are nearly as much at the mercy of your patients as the doctors are.

When sickness comes into a household the physician is often asked to recommend a trained nurse. The time has already come when no nurse but a "trained one" stands half a chance. The doctor mentions the name of Miss Jones. The patient says at once "Oh! can't you get some one else? I had her two years ago and would not have her again on any account." "Why so? She is a very competent woman." "Yes, I know she is; but while I was convalescing she nearly talked me to death." Or, "Oh, yes, she is competent enough; but while she was here she told me all the horrible details of every case she had attended for the last five years, and of course I know that she told her next patient all that she knew about me." Or "She may be professionally competent, but so are lots of others now-a-days; and Miss Jones is altogether too aggressively cheerful. When my husband was awfully ill—nigh unto death—she was continually smiling and laughing and trying to crack jokes with all the family." I warned you a few minutes ago that it was unwise and improper to render services grudgingly and ungraciously. But the opposite extreme of being

flippant and jocose in the presence of serious illness is quite as much out of place. Even though the patient be not in as serious danger as the family think, always bear in mind that it is ever the part of good breeding to be considerate of the feelings of others. The family feel just as you would if you *knew* that one whom you loved was in imminent danger. Bear that in mind; and while it is entirely proper for you to reassure them, and go on cheerfully with your duties to the sick, levity can be nothing but annoying and disgusting to them.

I told you a moment ago that one patient would object to a nurse because "she talked her to death." The very fact that she told me this showed, of course, that the statement was a gross exaggeration. But you will have to get used to exaggerated statements on the part of patients, sick or well. If you ask me how much a nurse ought to talk I am utterly unable to give a categorical answer. There is not—there can not be—a numerical answer of so many words a minute, or so many words an hour. Everything depends upon circumstances. You must learn to feel for yourselves, *instinctively*, when your conversation is diverting your patient from thoughts about herself or any other gloomy subject, and when you are boring her and tiring her out. Be on the lookout for these indications and if you err at all let it be on the side of reticence rather than loquacity. I say be on the lookout for these indications, for I know that you do not desire to do your patients an injury, and you are apt to get so interested in some subject yourself as not to notice how tired your patient is becoming. And sick people sometimes dread offending a nurse by hinting even that they are tired. After all I suppose that nurses cannot be expected to be more than human; and I have heard the charge that they talked too much laid at the doors of women who were not nurses, of lawyers, clergymen, and occasionally even of doctors.

I told you also that another patient objected to a certain nurse because she told her a lot of details about other cases. Now here is a fault, and a very grievous one, which you easily can, and always should, avoid. When you are called into a household professionally you always and necessarily come into possession of a host of facts which should be as sacred as those revealed to the priest in the confessional, in one sense. You have absolutely no right to disclose them to others as mere matters of conversation

or gossip. Whatever comes to your knowledge that you think may have a bearing on determining the exact condition of the patient, or the cause of such condition, or on the treatment or prognosis of the case, you should promptly report to the physician in attendance. He can be trusted to make no improper use of the information you may give, and his responsibility as to maintaining a discreet silence is just as great as yours. You are with the patient night and day and will often become cognizant of important facts which he cannot possibly observe during his comparatively short visits. But I beg of you to avoid talking to one patient about the case of another. You will be encouraged to do so many a time and oft; you will be asked indirectly and often directly, and begged to tell all about it; the most solemn assurances of absolute secrecy will be promptly and positively given; but I can assure you that they will very rarely, if ever, be kept. As a very shrewd woman once said to me, "What in the world was the use of my pumping all this out of the nurse if I could not afterwards tell it to others? Of course that was all I wanted it for." And it was; and it is; and it always will be, to the end of the chapter. Your story will be repeated and with your name attached to it; but it will be lengthened and broadened and colored up and embroidered until after it has passed through three or four mouths you will scarcely be able to recognize your own statement of the facts in the case at all. It is true that once in a while you may tell a case to a discreet person who will not repeat it to anyone; but such a person will have always judgment enough to discern, as I said before, that if you related other patients' cases to her you will also detail her case to others. And most patients—the best kind of patients—positively detest to have their illnesses and infirmities and operations bandied about from mouth to mouth to satisfy simply a prurient curiosity or furnish food for gossip. I have more than once had patients object to have a nurse in the house, unless absolutely essential, from the dread of this very occurrence. Indulgence in this habit must, apparently, be sweet as honey for the time being, but you may be sure that it will eventually sting like an adder, injuring yourselves individually and your calling in general.

There are many other qualities belonging to the equipment of an acceptable nurse, such as lightness of hand, quickness of observation, neatness in personal appearance, accuracy in statement,

anticipating your patients' needs and desires, and conduct at all times becoming a professional nurse and lady, to dwell upon which would be out of place here as well as unnecessary.

So far we have dwelt only upon your relations to your patient. But if you are to succeed in your profession you will be obliged to win the favor of the doctors as well. All the preparation and education in the world will be of no service to you, or enable you to be useful to others, if you do not find the opportunity of putting your knowledge into practice. I have told you that your reputation among the laity will have much to do with this, but so will your reputation with the medical profession.

Of course my recollection goes back to the time when schools for training nurses did not exist at all, and when male patients were cared for by male attendants if there were any such employed outside of the immediate family. In many cases the care was the very best that loving hands and hearts knew how to bestow. There was no lack of devotion or self-sacrifice; on the contrary, these excellent qualities were often most superbly displayed. But the lack of expert training and knowledge rendered the best efforts futile and sometimes even harmful. The heart was too much interested to permit the head to work clearly and effectively, and well-intentioned ignorance brought in its train the same dire results that followed it everywhere else. Even up to a very late day I have heard many a mother honestly and urgently assert that no paid nurse could possibly give to her child the same loving care that she would herself bestow. Of course no one is fool enough to claim that a mother's love can be bought; but when a sick child is to be cared for, mother's love, with its yearnings and prejudices, is often the worst possible thing for it. Judicious nursing does not involve harshness, or cruelty, or unnecessary deprivations; indeed it involves just the contrary of all these. And it accomplishes over and over again what an ignorant mother's love will ever fail to accomplish. It has frequently occurred to me to meet with opposition the first time that I recommended the employment of a trained nurse in a given family; but it gives me pleasure to say—and it is greatly to the credit of your calling—that I do not remember ever having an objection offered when a second occasion arose for such assistance. I can, on the other hand, recall many where the suggestion first came from the family, and not a few where the nurse was sent for without my

knowledge, but with confident reliance that such a course would meet with my approval.

But we have wandered from the point of your relation to the physician. I have told you that you should cultivate habits of observation and should inform him promptly of everything that you notice which can have any bearing on any aspect of the case. Many a time nurses have told me of some symptom or condition on Thursday, which had been in existence for days, a knowledge of which on Monday would have been of incalculable advantage. The explanation usually is that they did not think that it was of any importance. Let me urge upon you again to err on the side of telling him too much rather than too little. If the fact you mention is of no importance, no harm is done; while the omission to report an important fact may deprive him of the means of making a more correct or accurate diagnosis or instituting a more satisfactory or successful course of treatment.

Let me advise you, in the next place, to avoid the error of criticising the physician in attendance to the family or to outsiders. Loyalty to the medical attendant is your only proper attitude, the only one which will pay you, the only one which in the long run will conduce to the recovery of your patient. Of course physicians are human, and all human beings in any line of work are liable to make mistakes. If any one of you is prepared to say to-night that she has never made a mistake she had better select some other occupation to-morrow morning. She is either too untruthful to be trustworthy, or too stupid to recognize what she has done, and in either event she should select some much less responsible field of labor. If your suspicion that the physician has made a mistake as to the patient's condition as to the dose of medicine which he has given, or as to any other detail of the case, becomes a firm conviction, it is entirely proper for you to call his attention to the point in a respectful manner in order that he may correct a possible error. But remember that you are not expected to make diagnosis or to institute or regulate treatment; your province is to carry out the directions of the attending physician. It is a well-known fact that remedies given in apparently identical conditions, for the relief of precisely the same symptoms and in the same doses, do not have precisely the same effects. Patients have individual peculiarities, idiosyncrasies they are called; the unexpected, instead of the expected, happens. One of your great

uses in the sick-room is to note these, as no layman could, and report them promptly. Sometimes it will answer the purpose perfectly to do so at the physician's next visit. At other times it is essential that the physician should know the condition at once, and it is precisely in such cases as these that your education and experience are of incalculable value. Both the family and the physician rely on your discretion and good judgment. The relations between you and the attending physician should be such that each can rely on the other implicitly to perform his and her share of the work respectively. You are trained nurses, you are not trained physicians, and it very often happens that all the facts concerning a case are not and ought not to be told you. Very often the physician refrains from telling you some very important facts for the purpose of saving you annoyance and trouble. If you knew these facts when embarrassing questions were asked you, you would be obliged to prevaricate, or else to give the questioner information to which he has no right and which the patient does not desire him to have. Your ignorance of some facts will often prove your greatest safeguard.

There are some people in this world who are always afraid that they are not going to be properly appreciated or respected, who are always on the lookout for some slight or injury. I beg of you not to join that crowd. Your calling receives most just consideration both from the laity and the medical profession. It is universally recognized now that good nursing is in many cases quite as important as medical treatment, and in some even more so. The most successful physician is he who gives a minimum of drugs and provides the best nurse. Before you undertake to resent a slight, be sure that one was intended—that you are not the victim of your own imaginings. Your calling is most highly respected, and each of you will be individually if you attend diligently to your own business and allow others to do the same. And if you attend diligently and successfully to your own business you will have quite enough to do.

One word more and I have done. To-night you receive your diplomas. It will be said of you thoughtlessly by some that you have completed your education. On the contrary I want to impress upon you that your education is but just begun. This is Commencement night with you—commencement not only of your life work, but the commencement of your real education as well.

Almost all that the school has taught you is how to learn. Hereafter you must rely to a greater extent than ever before on your own resources; you must learn to observe and think and act for yourselves, and this is the most difficult and important part of your education. Keep up your reading, keep up your studies, keep in touch with the leaders of your profession, keep in touch with your associations and societies, keep in all things abreast of the times, and success is sure to follow your honest efforts.

Your teachers in the school have done the best they knew how to do to give you a good start. We believe that the opportunities you have had here are as good as in any other school of its age in the land. We rely on you who are graduating now to so conduct yourselves in all respects as to give your Alma Mater the reputation she deserves. I am sure that each will strive to make her second to none and our hearty prayer is that permanent success may crown your efforts.

ACUTE ULCERATIVE ENDOCARDITIS.

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The following cases of acute ulcerative endocarditis are reported not with the idea of adding anything new to the ætiology or pathology of this obscure disease, but rather to review whatever facts we now possess with the hope that we may profit by our mistakes in the past and avoid errors in the future. The subject of the pathology and symptomatology of ulcerative endocarditis is well nigh exhausted; the problems now to be solved being the relation between this disease and the diseases with which it is usually associated, rheumatism, chronic cardiac disease, diphtheria, pneumonia, etc., and what determines the severity of the attack: why, for instance, an attack of rheumatism or scarlet fever should in one case be complicated with an endocarditis of the simple verrucose type, and why in another case the endocarditis should become malignant from the start and end in speedy death. In the pyæmic class of cases, those that are so aptly named by Wilkes "arterial pyæmia," the origin of the disease can be readily understood as a simple engrafting upon the endo-

cardium of a colony of the invading organisms. But in the majority of cases, among which we must place the two herein reported, no such evident explanation is forthcoming.

Case 1 is of particular interest because of the development of an acute ulcerative endocarditis upon a chronic endocarditis of the aortic valve, the ulceration extending through the auricular wall to the auricular surface of the tricuspid valve, perforating through the sinus of Valsalva, this perforation resulting in a perplexing endocardial murmur.

H. C., 45, single, was admitted to the Samaritan Hospital complaining of pain in the left chest, cough, tinnitus aurium and great restlessness. Temperature, 97°; pulse, 90; respiration, 20. He had been drinking heavily the preceding week, had been unable to eat solid food, vomited every morning, had cough, headache and tremor. The family and personal history was negative beyond the fact that he had always been a heavy drinker. Physical examination showed a well-nourished man of 165 pounds, tongue coated heavily with brownish fur, marked tremor of both tongue and hands. Examination of the chest revealed a somewhat dulled percussion note over the lower left chest, over which broncho-vesicular breathing with a slight friction rub was heard. The heart dullness was enlarged downward and outward, the heart sounds being very weak, but a soft blowing systolic murmur at apex not transmitted to left could be heard. Over the second right intercostal space was a loud rough systolic murmur, transmitted into the carotid. No accentuation of the pulmonic second sound. The liver was enlarged, extending four and one-half inches below the free margin of the ribs and distinctly palpable. Spleen enlarged. Abdomen somewhat distended and tender. Blood examination disclosed a leucocytosis of 21,000, mostly of the polynuclear variety, red cells 4,000,000, hæmoglobin 83%. Urine negative. From this examination a diagnosis of acute alcoholism with signs of a beginning pneumonia and an aortic stenotic murmur, probably chronic in character, was made.

On the day of admittance to hospital, the patient had a severe chill, his temperature shot up to 105°, pulse 120, respiration 44. The pulse was very feeble and intermittent, and the patient was wildly delirious. Two days later his condition was somewhat improved; he had severe cough, but no rusty sputum. *July 2nd*, three days later, patient remained in delirium, with heart sounds very weak, murmurs unchanged. *July 5th*—On this day distinct systolic and diastolic murmurs were heard at the base, the latter with a distinct musical intonation. It was transmitted down the sternum, but was heard with maximum intensity over the third right costal cartilage. The systolic murmur at base was much softer than before.

At this time a diagnosis of ulcerative endocarditis was made. Cultures made from the blood remained sterile. The widal reaction was repeatedly tried, but always found negative. From this time his condition remained the same until death occurred, July 9th.

At the autopsy, which was performed by Dr. Elting, of the Bender

Hygienic Laboratory, the following conditions were found: The lungs, beyond a thickened pleura over the left side, were negative. The heart was dilated and hypertrophied, measuring fifteen and one-half centimetres, apex to base by thirteen and one-half centimetres transversely. On the auricular surface at the junction of the posterior and left segments of the tricuspid valve, was an irregular vegetation, about two centimetres in diameter and projecting two centimetres into the cavity of the auricle. The surface was irregular, ulcerated and of grayish color. Corresponding to this situation, there was on the ventricular surface of this valve a vegetation two centimetres in diameter and projecting two centimetres into the cavity of the ventricle, this vegetation being continuous with the one before described. The vegetation on the auricular surface presented a small funnel-shaped opening which led into the sinus of Valsalva behind the anterior segment of the aortic valve, the opening being three-fourth millimetre in diameter. This segment of the aortic valve was much thickened and on both ventricular and aortic surfaces presented small ulcerative vegetations. The other aortic segments were retracted and the septum between the anterior and right posterior segment was largely destroyed, a small fibrous cord only remaining. The mitral valve flaps were slightly thickened along the free edge, but not retracted. Pulmonic valve normal. Mural endocardium normal. Spleen showed a number of white infarcts.

In this case then we have an example of the so-called cardiac type of the disease. This form occurs rather more frequently than the other forms of ulcerative endocarditis and usually runs a sub-acute rather than an acute course. The diagnosis may be easy, provided we are familiar with the condition of the patient's heart before the onset of the attack. On the other hand, the evidence afforded on the part of the heart may be entirely inadequate for diagnosis. The pathological peculiarity of this type is that the vegetations are usually secondary to an old chronic rheumatic endocarditis. Many cases closely simulate malaria either of the tertian or quotidian type. In one celebrated case reported by Dr. Bristow in 1880, the symptoms so closely resembled intermittent fever that only after three or four weeks of careful observation was a correct diagnosis reached.

In case two we have a typical example of the typhoid type of the disease in which the symptoms closely simulated typhoid fever, and in which the heart, aside from multiple emboli, gave little or no evidence of valvular disability or of organic disease.

R. M., single, 24, packer by occupation, came to the hospital complaining principally of dimness of vision, pain in the right eye, headache and diarrhoea. His family and personal history were negative up to the time when he enlisted in the war with Spain and went south. While there, he was attacked with a fever said to be typhoid, and was removed to Fort

Thomas, Ky. Ever since that time he has complained of headache. He was able, however, to go to work in June and to continue until the following March, when his present illness began with headache, nausea and a severe chill. At this time, he says, he got a cast filling in his eye for which he consulted a physician, who said he was unable to detect any foreign body therein. From this time his condition grew worse, the temperature mounted to 104° , pulse 120, patient became delirious, and his condition grew into what we are wont to term "typhoid state." The conjunctivitis grew worse in spite of treatment, until a general suppurative pan-ophthalmitis resulted.

In this condition he came into the hospital, temperature 104° , pulse, 120; tongue dry and cracked, coated with brownish fur, sordes on lips and teeth; abdomen tympanitic; diarrhoea, with light yellow pea-soup stools passed involuntarily. No rose spots. Examination of the heart revealed very weak sounds with a very soft systolic murmur not transmitted. Lungs negative; liver and spleen not palpable. Such was his condition on entering the hospital, and such it remained until death, the temperature varying between 103° - 105° , pulse never below 120. No more chills. The soft systolic murmur at the apex disappeared. The urine was negative beyond a slight trace of albumen.

At autopsy, which was performed by Dr. Blumer, the following conditions were found: Left eye normal; right eye bulging, anterior chamber filled with what appeared to be pus, conjunctiva markedly injected. Heart presented at base of one leaf of aortic valve a small patch of pale vegetations. Occupying the ventricular surface of two leaflets of aortic valve there was a very fresh thrombus, which projected out into the lumen of the opening. The mass covered an area of one and one-half centimetres in diameter, and immediately behind it on the wall of the aorta was a distinct loss of substance with sharp edges reaching down to the adventitia. The spleen was enormously enlarged, $20 \times 12 \times 6$ centimetres, and showed a number of fresh partly decolorized infarcts. The kidneys show one or two white infarcts. Numerous petechial hæmorrhages were seen on surface of chest, pleura, kidneys, bladder and intestines.

In this case then we have only the soft systolic murmur at the apex, the most perplexing and uncertain of all signs of cardiac disease present. Indeed this apex systolic murmur is often present in ulcerative endocarditis and may be the only symptom in evidence on the part of the heart.

There is another type of malignant endocarditis, an example of which I am unable to report here to-night, but which shows itself as a meningitis either of the cerebral or cerebro-spinal type. In either class of cases symptoms calling attention to the heart may be entirely wanting until a sudden paralysis or hæmaturia may proclaim the advent of a shower of emboli.

As to the ætiology of ulcerative endocarditis, much has been

written and many experiments have been made, but we must admit we are as yet very much in the dark. Microorganisms of many kinds have been described as being present in the vegetative growths and in some cases the same microorganisms have been cultivated from the embolic abscesses; but that is not sufficient—we must satisfy ourselves as to the source of the microorganisms concerned. The organisms most often found are those belonging to the pus group, streptococcus, staphylococcus aureus and others, the pneumococcus and rarely typhoid, tubercle, diphtheria bacilli, and gonococci have been found in which the specific disease caused by these bacilli was the primary trouble. In some cases a hitherto unknown bacillus has been described as causing the disease, such as *bacillus endocarditis griseus*, *micrococcus endocarditis rugatus*, *bacillus endocarditis capsulatus* and many others. But after all, of what avail is our knowledge of the minute bacteriology of such diseases if it must end there and we can not trace the life history of the organism, both before its entrance into its host and after entering the host until its final discovery in the tissues. This has been worked out for many diseases, but in the disease in question we are as much in the dark as ever. At least some of the organisms found in ulcerative endocarditis have also been found in cases of simple verrucose endocarditis. Under what circumstances can this take place? Either the organisms under certain conditions must be possessed of unwonted virility or the vital resistance in the host is so much lowered as to afford exceptionally favorable conditions for their development. This might explain the cases that are engrafted in an old chronic endocarditis. A case in point is reported by Broadbent: A strong young man, somewhat of an athlete, but who had a slight chronic aortic valvulitis, was one day rowing on a river somewhat foul from sewerage when he passed the mouth of a sewer and inhaled the foul smelling gas. He immediately felt sick to his stomach, went home and in two or three hours developed an acute ulcerative endocarditis and died. In this case, the comparatively slight affair of inhaling the gas may have been just enough to turn the scales and allow the old endocarditis to pass into the more malignant form.

Ulcerative endocarditis occurs as a complication of pneumonia and meningitis in which the pneumococcus is the organism found; as a complication of septic processes in which the pus cocci are

found; as a mixed infection secondary to an infectious fever or a chronic valvulitis in which any one of many organisms may be found. A few cases have been reported in which the endocarditis seemed to be secondary to gall stones either with or without suppuration of the biliary passages.

Now to which group of causes do the present cases belong? Case 1 undoubtedly had a secondary infection engrafted on his old chronic endocarditis in which his prolonged debauch was just enough to lower his vital resistance and allow the germs a chance to become located, to grow, to produce their toxins and finally to cause the death of their host.

In Case 2 we must look somewhat further for a cause. A presumably healthy man is stricken down with acute ulcerative endocarditis. Two years before he had typhoid fever from which he never perfectly recovered. May there not have been some relation between the two diseases? We have so-called post typhoid lesions developing occasionally much longer than two years after the primary disease. Such a process may have been present in this case but not discovered at autopsy. The fact that the clinical picture of this disease was almost identical with that of a typhoid infection lends color to this view.

NOTES ON PANCREATIC DIABETES.

WITH THE PATHOLOGICAL REPORT OF A CASE.

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Pancreatic diabetes was first described in 1877, by Lancereaux, as a form of diabetes in which the onset is sudden, the emaciation and loss of strength rapidly progressive, and which has an early fatal termination. In 1890 Mering and Minkowski produced this disease by extirpating the pancreas of dogs, and later experimenters have found that ligation of the duct of Wirsung is not sufficient to cause the disease and that it is necessary to remove the whole or at least nearly all of the pancreas in order to produce diabetes. If the organ is transplanted into the abdominal walls and its function of intestinal digestion in this way elimi-

nated, diabetes does not follow. These facts have led to the conclusion that the pancreas supplies an internal secretion and that diabetes is produced by interference with this function of the gland. The nature and origin of this internal secretion has been the subject of considerable study. L  pine¹ maintains that it is a glycolytic ferment which breaks up the glucose in the blood and thus prevents its excretion by the kidneys. He² made the following experiment to show the influence of such a ferment in the blood on the consumption of sugar: A healthy dog was bled to death. Into one of the hind legs blood was transfused, poor in glycolytic ferment (taken from the vessels of a dog whose pancreas had been removed.) Into the other hind leg blood was transfused which was rich in glycolytic ferment (taken from a healthy animal.) He invariably found that the consumption of sugar was greater in the leg into which was transfused blood containing a normal amount of glycolytic ferment. In another experiment with solutions of sugar and yeast, to which were added pieces of pancreas, the nerves of which had been subjected to the Faradic current, he found after several hours, sugar in smaller quantities in the bottles containing the pancreas than in the control bottles containing the sugar and yeast, but no pancreas.

He claims to have determined the zymogen which gives rise to the glycolytic ferment and has attempted to make practical application of his discovery by giving his diabetes patients artificially prepared glycolytic ferment, and has by this means succeeded in reducing the excretion of sugar considerably. He does not claim to cure diabetes in this way, but simply meets one indication, *i. e.*, diminished glycolysis.

Tuckett³ claims that pancreatic diabetes is due to an auto-intoxication. His experiments on dogs show that there is in the lymph of the thoracic duct during full digestion a toxine which, if injected into the portal circulation, will cause glycosuria, but that lymph from the thoracic duct of a fasting animal will not; and further, that if the latter lymph be injected into the portal circulation of a dog affected with pancreatic diabetes the glycosuria will be diminished. He concludes that there is an internal secretion constantly taken up by the circulation from the pancreas and which is ever present in the blood of healthy animals, and that it neutralizes the toxine which is periodically emptied into the circulation during digestion. If the pancreatic internal secretion

is deficient in quantity, so that the toxine is not neutralized, we have pancreatic diabetes as the result.

How this toxine causes glycosuria has not been determined, but it is probable that it acts by overstimulating the liver so that the glucose is given up too freely to be used by the muscles and is excreted. The presence of anything that would irritate the liver cells would prevent the storing up of glycogen, according to A. Mayer,⁴ who claims that the irritation produced by the pigment in diabète bronzé is the cause of the glycosuria in that disease. He has repeatedly injected indigo-carmin into the jugular vein of live animals and found a few hours later the bile capillaries filled with crystals of indigo-carmin and a disappearance of the glycogen stored up in the liver. This overstimulation of the glucose discharging function of the liver may be produced also, as is well known, by irritation of the center in the medulla. The pancreatic internal secretion, according to Kauffmann,⁵ modifies the glucose formative power of the liver, and at the same time expands its storage limits. In pancreatic diabetes there is an overstimulation of the glucose formative function of the liver, and diabetes is always due to an overproduction of glucose, and not to an arrested glycolytic ferment.

The importance of the liver's function in the production of diabetes is well shown by the experiments of Marcuse. He extirpated the pancreas of frogs and produced diabetes in each case. In a second series he extirpated both pancreas and liver, and although the frogs lived several days and excreted considerable urine, in not one case did diabetes develop.

These considerations of the liver's action under irritation, whether by Tuckett's toxine, by the pigment in diabète bronzé, by the foreign substances in Mayer's experiments, or by nervous action, make Kauffmann's theory of overproduction of glucose more attractive than Lépine's theory of diminished glycolysis.

It is very probable that the islands of Langerhans supply the pancreatic internal secretion, the absence of which may cause diabetes. These bodies resembling glomeruli are made up of cells, the nuclei of which differ from those of the secreting cells of the acini, and whose protoplasm has a distinctly different staining reaction from that of the secreting cells. They are found in many of the lobules of the pancreas and are most numerous in the splenic extremity or tail. They are richly supplied with capillaries and

are surrounded by a very delicate capsule of connective tissue, so thin that in normal cases it is often invisible in sections stained by ordinary methods. The capsule and capillary walls are well shown in sections stained by Mallory's⁶ new connective-tissue stain.

Laquesse⁷ found that the islands of Langerhans have no connection with secretion of the pancreatic juice and suggested that they produce an internal secretion.

Opie⁸ has studied the Islands in the pancreas of cats and has shown that they have in the fully developed organ no connection with the secreting ducts, but are in intimate connection with the circulation. He refers to two cases of diabetes reported by Ssobolew, in which he was unable to find any islands of Langerhans present.

In a later paper Opie⁹ reports several cases of cirrhosis of the pancreas and describes two varieties of interstitial pancreatitis, *viz.*, interlobular and interacinar cirrhosis. He reports thirteen cases of the interlobular form in which the islands were not affected, or at least not until the cirrhosis had advanced so far as to interfere with their function by compression brought about by the contraction of the newly formed fibrous tissue. This form occurs in infants affected with congenital syphilis, infections by the colon bacillus, or by obstruction of the ducts by calculi, tumor or traumatism. In only one case in this series of thirteen was there any glycosuria, and in this case the cirrhosis had extended so far as to squeeze the islands and divide them into lobules of atrophied cells.

In the second variety (the interacinar form) he finds the new formed tissue within the lobules often in the immediate vicinity of the islands of Langerhans forming a close network of coarse bands of fibrous tissue. In some cases the islands are surrounded by thick capsules and are divided into lobules by fibrous bands which are the thickened capillaries of the islands. In two of the three cases diabetes was present. The third occurred in a case of hæmochromatosis, which in a latter stage, is associated with diabetes (*diabète bronzé*) as a result of the pancreatic lesion. In another case of diabetes which was rapidly fatal he found amyloid degeneration of the islands beginning just outside the capillary walls.

The case which I am reporting is one of acute or pancreatic

diabetes and the pathologic findings show that it belongs to the second variety, described by Opie, viz: interacinar pancreatitis.

History of the case: F. G., aged 40; single; German; carpenter. Family history unknown. History of syphilis or any other previous illness unobtainable, but he is said to have been intemperate. On admission to the hospital October, 1898, he was in a state of chronic melancholia, considerably depressed and controlled by marked hallucinations of hearing. His insanity was of a year's duration, probably longer, but he was in good physical health, weighed about 150 pounds, and was able to be employed daily at a laborious occupation. He remained in good health until two years after admission, when he began to emaciate and show considerable weakness. He soon became untidy, constantly wetting his clothing, and showed considerable œdema of the ankles. Examination of the urine showed the amount to be increased to 328 ounces in twenty-four hours and containing eight per cent. of sugar. Along with his polyuria he had the usual increase of appetite and great thirst. The skin was dry, but there were no boils or other lesions. No cataract. Examination of lungs negative. A loud mitral systolic heart murmur. He was kept in bed on a liberal milk diet, but his diabetic symptoms steadily progressed. Repeated examinations of urine revealed in each instance a large quantity of sugar, but never albumen. Three months after the disease was discovered he died of acute lobar pneumonia.

Autopsy, five hours after death: body emaciated; musculature fair; rigor mortis well marked; no skin lesions or deformities.

On opening thorax lungs do not collapse. Pleuræ adherent in a few patches. Lungs crepitate throughout and are dry on section with the exception of the left lower lobe, which is in the state of red hepatization. No tuberculosis. Heart weighs sixteen ounces; the right side hypertrophied and its cavities engorged with organized clots extending upward into the pulmonary artery as far as its bifurcation. Valves of the right heart normal. The left ventricle is small. Aortic valve normal, but the mitral is obstructed by a large calcareous deposit so that the orifice scarcely permits the passage of an ordinary lead pencil. No gross evidences of atheroma in the aorta. No remains of the thymus. Stomach considerably dilated. Spleen five ounces; firm on section; capsule smooth. Liver sixty-five ounces; large and mottled; nutmeg appearance on section. No calculi in gall bladder or ducts. Left suprarenal body is of normal size; brown liquid within as is commonly found. The right is a little larger and firmer. The kidneys are large; the left considerably congested. The right one weighs seven ounces; the left eight and one-fourth ounces. Their capsules are adherent in only a very few minute patches. On section their markings are distinct. Intestines and mesentery show venous congestion. Mesenteric glands normal. Vermiform appendix normal. The pancreas weighs two ounces. The splenic end appears normal, its lobules distinct and of a normal pink color. The head is atrophied and loose in structure and the lobulations are not well defined. No tumors, cysts or hemorrhages, and no obstruction of the duct.

Brain: Dura not adherent. Cerebro-spinal fluid not increased. Pia-arachnoid appears a little oedematous and shows pearly opacities along the line of veins. No hemorrhages or tumor of the brain or medulla. Vessel at base show no gross evidences of atheroma and are of a normal size, except the right posterior communicating, which is rudimentary.

Anatomical diagnosis : Brown induration of lungs with red hepatization of left lower lobe. Mitral obstruction. Dilated stomach. Nutmeg liver, Hypertrophy of kidneys with just beginning interstitial increase. Atrophy of the head of the pancreas. Usual brain changes of chronic insanity.

Microscopical report : Large motor cells of brain pigmented and loose granules of pigment found in pericellular spaces and occasionally a few granules in the tissues near the large pyramidal cells. By Nissl's method cells show a moderate chromatolysis, Moderate arterio-sclerosis of cortical vessels. No punctate hemorrhages in the cerebral cortex nor in the medulla. Medulla shows no tumor or any other noteworthy change. The spleen appears somewhat anæmic and large numbers of red blood cells are found only in the tissue just beneath the capsule. Suprarenal bodies appear normal. The liver has a typical nutmeg appearance. Each central vein is surrounded by a zone of cyanotic induration. The outer cells of the lobule surrounding the congested area appear normal and show no fatty change, but those surrounding the vein are atrophied and pigmented, about half of each lobule being thus affected. There is a slight increase of connective tissue with moderate round cell infiltration. In the kidneys the vessels show advanced changes. The muscular coat is thickened and the intima contains nodular areas of atheroma. Occasionally a vessel is found almost obliterated by endarteritis. There is little increase of interstitial change and only a few glomeruli are atrophied. The epithelium of the tubules appears practically normal. Considerable venous and capillary congestion. In sections from the hepatized lobe of the lung the alveoli are all completely filled with pigmented leucocytes and fibrin. The bronchioles are completely blocked with fibrin. The alveolar walls are thickened.

Pancreas: In the splenic end there is a moderate interacinar cirrhosis. The islands of Langerhans are normal in number. Many of them are not clearly defined in outline and others are surrounded by a distinct connective tissue capsule and are separated into little lobules by fibrous bands. In the body are many cirrhotic islands and occasionally one is found which seems to be degenerating in its central portion. Tissue from the head is loose in structure and in some lobules the secreting acini are atrophied. The islands are scarce and are surrounded by thick fibrous capsules, and are separated into lobules by thick bands, evidently the thickened capillaries of the island. Bands of fibrous tissue extend outward between the acini which immediately surround the island. In sections from two blocks of tissue from the head no islands can be found and in some parts of the head islands are found whose cells seem to be degenerating. Throughout the pancreas the larger vessels show decided arterio-sclerosis and venous congestion. The cirrhosis is everywhere of

the interacinar type and as a rule most marked in the immediate vicinity of the islands of Langerhans, although in some sections it appears to have extended from the thickened walls of the ducts. The fibrous bands which divide the islands into lobules are made up of thickened capillaries which contain red blood cells. In sections stained with Weigert's elastic stain no elastic fibres are found in the cirrhotic tissue.

It is interesting to note that in this case there are several etiological factors, each one of which has frequently been assigned as sufficient to cause glycosuria, *viz.*: mental strain, arterio-sclerosis, pancreatic disease and chronic congestion of the liver. The importance of the liver in the production of diabetes has long been considered. The glycosuria is brought about by a discharge of the glycogen due to disease of the gland itself or by stimulation of its glycogen discharging functions by puncture of the extremity of the calamus scriptorius in the fourth ventricle, or possibly by psychic disturbances.

These factors acting alone cause only a transitory glycosuria but not true diabetes. In the case of diabetes under consideration in this paper, however, we have another factor which is very probably the essential one in causing the glycosuria to be constant and so producing true diabetes, *viz.*, disease of the islands of Langerhans. In this case we have the glycogen storing function of the liver interfered with by the chronic congestion, and possibly the glycogen discharging function stimulated by the mental strain and, on account of disease of the islands of Langerhans, there is an insufficient amount of the internal secretion of the pancreas to prevent or overcome the hyperglycæmia.

In this connection it seems to matter little whether the internal secretion is of the nature of a glycolytic ferment or whether we accept Tuckett's theory of auto-intoxication.

In this case of diabetes it would seem that the disease depended primarily upon the cardiac disease and the concomitant arterio-sclerosis. When the heart disease had advanced so far that the liver became hyperæmic and many of its cells destroyed, the glycogen storage capacity was largely crippled, and its glycogen discharging function stimulated by the chronic congestion and the psychic strain. This of course would not have been sufficient to cause diabetes if the arterio-sclerosis had not interfered with the elaboration of the internal secretion of the pancreas by affecting the fine capillaries of the islands of Langerhans.

Many cases of diabetes are associated with heart disease and

arterio-sclerosis and are probably produced in this same manner. I have recently found among some old material a case resembling the above in its pathologic changes. The case was of an old man with chronic melancholia who had periodical attacks of glycosuria. Autopsy revealed pneumonia, mitral regurgitation, nutmeg liver and cirrhosis of the pancreas. His vessels were markedly atheromatous.

BIBLIOGRAPHY

1. LÉPINE. *Annual of Universal Medical Sciences*, Vol. 1, 1896. F. 36.
2. LÉPINE. *Medical Record*, Vol. 47, p. 494.
3. TUCKETT. *Journal of Physiology*, Vol. 25, p. 63.
4. A. MAYER. *Medical Record*, Vol. 56, p. 912.
5. KAUFFMANN. *Medical Record*, Vol. 50, p. 590.
6. MALLORY. *Journal of Experimental Medicine*, Vol. 5, No. 1.
7. LAQUESSE. *Annual of Universal Medical Sciences*, Vol. 4, 1896. I 17.
8. OPIE. *Bulletin of Johns Hopkins Hospital*, September, 1900.
9. OPIE. *Journal of Experimental Medicine*, January, 1901.

Clinical and Pathological Notes

A Case of Diphtheria. Clinical Notes by CHARLES E. DAVIS, M.D. *Bacteriological Notes by* ARTHUR T. LAIRD, M.D.

The following case of diphtheria is of interest for two reasons: first, the rapidity of the action of the antitoxin; and, second, the results of the experiments made with cultures on guinea pigs, showing the virulence of the bacillus, after three and five weeks, respectively. The difficulty of obtaining pure cultures for growth and inoculation, from cultures made during the sixth and seventh weeks of the disease accounts for the discontinuance of the experiments. The inoculations, cultures and post mortem examinations on the guinea pigs, were made by Dr. Laird, under the direction of Dr. Blumer at the Bender Laboratory. The question of the length of time a case of diphtheria should be quarantined, after the disappearance of all signs of the disease from the throat, but while the bacillus continues to be present, is one which should, at this time, be fully discussed. Intelligent cooperation of the physician with the health authorities in insisting upon isolation, so long as the bacillus of Loeffler is found in

the throat, will go far toward stopping the spread of this disease. There can be no question of the virulence of these organisms, even when found as late as three months after the disease occurs. Experiments made by Welch, Blumer and the Massachusetts Board of Health ought to be accepted as conclusive evidence of the possibility of contagion after six or even twelve weeks.

The present rule of the local Health Commissioner, that cases must be quarantined so long as the bacillus of diphtheria is found in the throat is one which every physician should do all in his power to enforce for the safety of the public health and the prevention of the spread of the disease.

MISS GRACE C., eight years of age. General health excellent; previous history good.

December 8th, 1901. First day, A. M. Prostration and chills; evening temperature 101°F. ; pulse, 100; enema followed by a small dejection.

December 9th. Second day. Restless during the night, with slight delirium, nausea and vomiting every hour. Complained of throat being sore at half-past three o'clock in the afternoon. On examination of the throat, a membrane was seen covering the right tonsil, extending back toward the pharynx, with a small patch on the left. Temperature 102.2°F. ; pulse, 120. Still vomiting with chilly sensations and general malaise.

The diagnosis was made, on the appearance of the membrane, and general characteristic symptoms of diphtheria, which was verified by Dr. Henry Hun, and at three forty-five P. M. ten cubic centimetres of antitoxine (Pasteurs) were administered. A culture was immediately taken from the throat. 5 P. M.: Vomiting; two small dejections; Urine, two fluid ounces. 6 P. M.: Malted milk, two ounces. 8 P. M.: Temperature 101°F. ; pulse, 110. Malted milk two ounces. 9 P. M.: Vomiting and restless.

10:30 P. M.: Restless and delirious; feels very tired, slept from nine o'clock.

December 10th. 1:30 A. M.: Ice bag applied to head, small quantity of water. 4.30 A. M.: Coughing with some expectoration of membrane. 8 A. M.: Two ounces of Cereal

milk; slept two hours. Temperature 100.4°F. ; pulse, 90. 10 A. M.: Two ounces milk; four ounces chicken broth, given and retained. 12 M.: Ice cream, two ounces. 1:30 P. M.: Temperature 100°F. ; pulse, 104. Vomiting had stopped and there was a marked improvement in patient's general condition.

December 11th. Third day. 8 A. M.: Temperature 99°F. ; pulse, 100. 1 P. M.: Temperature 100.8°F. ; pulse, 104. 9 P. M.: Temperature 100°F. ; pulse, 104. Continued improvement in condition and membrane rapidly disappearing. Peroxide as a spray and chlorate of Potassium as a gargle during the day.

December 12th. Fourth day. 8 A. M.: Temperature 99°F. ; pulse, 100. Malted milk and broths every two hours during the day.

December 13th. 8 A. M.: Temperature 99°F. ; pulse, 100. 5 P. M.: Temperature 99°F. ; pulse, 110. Membrane had entirely disappeared except in one ulcerated spot in the right tonsil, which showed some destruction of the tonsil.

December 14th. Temperature 98.4°F. ; pulse, 90. After this time the case made a very rapid recovery; the ulcer had completely healed in three days. No complications of any kind resulted, and the child was allowed to be out of bed and dressed after the seventh day.

BACTERIOLOGICAL EXAMINATION OF CULTURES FROM THE THROAT OF G. C.

Cultures were taken December 9, 17, 23, 25, 30, 1900; January 2, 6, 9, 13, 20, 25, 1901. All of these eleven cultures on examination showed the presence of the diphtheria bacillus except the last, January 25th.

An agar plate was made from the culture received December 30th, three weeks after the first culture, and the diphtheria bacillus was isolated. From this plate a colony was transferred to a blood serum slant. A suspension culture in bouillon was made from this slant and when the culture was seventy-two hours old eleven minims of it were injected sub-

cutaneously into the abdominal tissues of a guinea pig weighing 500 grams.

January 8th. Guinea pig was less active and there was a slight swelling at the point of inoculation.

January 9th. Guinea pig died in the morning of January 9th.

The autopsy. Weight 150 grams. Slight swelling noticed about the point of inoculation. Abdominal wall about the point of inoculation was markedly oedematous and hemorrhagic. There was a marked infiltration in all the structures of the abdominal wall, and they were bound together by firm adhesions. The superficial lymph glands in the groin and the axilla were enlarged and hemorrhagic. Both layers of the peritoneum were smooth, no excess of fluid being present.

On opening the chest, the pleura, lung and heart appeared normal. There were no subpleural hemorrhages noticed. The liver showed scattered white areas of necrosis. The suprarenal glands were hemorrhagic, especially on the left side. Culture taken from the seat of inoculation showed the presence of a diphtheria bacillus, and cultures from the heart, liver, spleen and suprarenal capsule were sterile.

An agar plate was made from the culture taken January 13th, five weeks after the first culture was received, and the diphtheria bacillus isolated. Culture was made on blood serum from this plate, and twelve minims of a four day bouillon culture derived from the blood serum slant were inoculated January 21st into the subcutaneous tissue of the abdominal wall of a guinea pig. The animal died January 23, forty-two hours after inoculation.

The autopsy. No evidence of any change at the seat of inoculation. The subcutaneous blood vessels on the side of inoculation were much distended, congested with blood; also subcutaneous oedema and swelling of the muscles about the seat of inoculation. No enlargement of the inguinal or axillary glands noticed. Both layers of the peritoneum were smooth and glistening, and peritoneal cavity was dry. Blood vessels were distended under the parietal preitoneum on the side of inoculation. Nothing abnormal noted about the liver. The lungs were slightly congested. Other organs appeared

normal. Culture taken from the seat of inoculation showed the presence of diphtheria bacilli. Cultures taken from organs were sterile.

Correspondence

COLLECTIVE INVESTIGATION OF THE INFLUENCE OF THE SILVER NITRATE INJECTIONS ON PHTHISIS

To the Members of the Medical Profession :

In 1892 the undersigned began a collective investigation of the action of cold in the treatment of acute pneumonia, and there is reason for believing that this procedure, which resulted in gathering four hundred cases of this disease thus treated, with a death rate not quite five per cent., was an important factor in calling attention to the utility of that treatment, and in introducing it to the profession of this country. That research was based on the conviction that no remedy can be called truly successful until it has passed the exacting crucible of clinical experience, and it is now proposed to apply the same ordeal to the silver-injection treatment of phthisis which, in a large hospital, dispensary and private practice, reaching over a period of three years, and during which many thousand injections were administered, has given me greater satisfaction than any other method that I have ever employed. In keeping with the above expressed feeling, a cordial invitation is herewith extended to those members of the profession who have the inclination and opportunity to investigate this method of treating phthisis and to whom a reprint on the subject, with full information and blanks to report cases, will be cheerfully sent on application.

THOMAS J. MAYS, M. D.

1829 Spruce Street, Philadelphia, Pa.,

August 15, 1901.

Editorial

"I consulted this morning the president of the London College of Physicians, who says that, with us, *doctor of physick* (we do not say *doctor of medicine*) is the highest title that a practitioner of physick can have; that *doctor* implies not only *physician*, but teacher of physick; that every *doctor* is legally a *physician*; but no man, not a *doctor*, can *practice physick* but by *licence* particularly granted. The doctorate is a license of itself."

SAMUEL JOHNSON.

The Life of Samuel Johnson, LL. D.
By James Boswell, Esq.

Under this title Dr. E. Nettleship, in the *Congenital Ophthalmic Review*, March, 1901, analyzes **Word-Blindness** the condition which lead to inability to learn to read and places this among the congenital defects which should be recognized by parents and tutors. The author cites an article by Hinshelwood, in *The Lancet* of May 26, 1900, in which are reported two cases of Hinshelwood's and two others. His own cases were those of two boys who could not learn to read, although much effort had been made by schoolmasters and private tutors in trying to teach them. The boys were bright and intelligent, and not behind their fellows of corresponding age, except in this one particular, that they could not learn to read. One had even unusual ability to remember words that he had heard spoken. The first patient reported was sent away from school, at the age of eleven, after having been there four years, because he could not be taught to read. He was unable to recognize by sight more than a few of the letters of the alphabet or to read any words at all, even of two letters. He had scarcely any visual memory for letters. He could read numerals better than letters, though not perfectly. He recognized other objects, as faces and pictures, very well. He could repeat the alphabet and numbers up to one hundred quickly and correctly, could spell short words dictated orally, knew his school "reading book" by heart, though he could not read a word of it, and could do, mentally, simple addition sums; his auditory memory of letters and numbers was excellent. Hinshelwood's second case was less severe. It was that of a boy, aged ten, who could read the alphabet and common, small words, like the article "the," but less common words, however short, such as "tub," he could read only after

he had spelt them aloud. He had done well in all his school subjects, except such as required reading, and it was noticed that he never read for pleasure. He could read numerals, by themselves or in combination, easily and correctly. The two cases quoted by Hinshelwood were those of boys, aged respectively fourteen and eighteen, of whom the former could read only words of one syllable and the latter could barely read at all. In both of these cases numerals were easily read and arithmetic caused little trouble.

Hinshelwood ascribes the difficulty to congenital want of visual memory; and this want of visual memory is due, he thinks, to an organic deficiency in the part of the brain where the visual impressions of letters and words are registered and stored. This explanation he bases on pathological evidence from cases in which changes have been found in the left supramarginal convolution and angular gyrus.

Nettleship gives five cases of his own; four of the five were boys. The first, a boy, aged eleven, was very like the others; immense pains had been taken in trying to teach him to read. He was very anxious to read and would sometimes cry because he could not see the words. He was a quiet and intelligent boy, fond of carpentering and planning, and played at least one game well. The ametropia in each of his eyes amounted to only one dioptre of hyperopia. He read Snellen's type at twenty feet, and the smallest of Jaeger's nearwork tests he read with extreme slowness and often only after spelling the words. Nettleship was surprised to find that his difficulty was quite as great in reading words that a normal eye can perceive and read at a distance of ten feet. The second case reported by Nettleship was that of a boy who had normal visual acuity of each eye, was said to read with more difficulty some days than others but had two dioptres of hyperopia and had been weakly as a child, which facts would account for the difference in his ability to read on different days. His parents report "he takes in what is read to him, but not what he reads." This case differs from any of the preceding in that after an enormous amount of patience and perseverance, this boy learned to read easily, and now reads both to himself and aloud with facility and pleasure. He is now a lawyer. This report was in February,

1901. His third case had nothing about it very peculiar. A boy, aged nine was backward in reading, though in other respects he was quick and not at all behind other boys of his age. His fourth case was that of a man, twenty-three years old, when seen by Nettleship in 1897. His tutor said that he had always been "a slow reader, bad speller, and unable to do paper work." If he tried to read quickly he put the syllables of the longer words in the wrong order. He was unable to take in the name of a street, painted at the corner, as he passed it. He remembered words by sound, but could not reproduce them by spelling, hence, though he had learned well by ear, he was considered not to be deficient in general knowledge. His faculties, other than for reading, were considered good. His incapacity for reading had been so great that during the previous fifteen years he had been taken to a great many oculists and to several physicians, in the hope that something might be done for his eyes or his brain. A well known Swiss ophthalmologist had been the first to decide that the case was one of imperfect development of certain cortical cells of the brain. The patient's visual acuity, with convex cylinder 1.25 D., axis vertical, was six-fifths of Snellen's normal. The fifth patient of Nettleship's was a poor reader and in reading interpolated words that were not there, could not easily pass from one line to the next apparently because she could not remember the appearance of the words in the line that she had just read. She had no trouble with needlework. Acuteness of vision in each eye was six-fifths. She was one of a talented and highly educated family and was the only one that could not read well. Two of her brothers, however, stammered. Nettleship thinks that if the defect be curable in cases of this kind the remedy will be methodical and persevering instruction in reading, begun at the earliest possible age, while the brain cells and fibres are yet capable of development. Assuming some capacity for improvement, which may be expected to vary with the degree of congenital deficiency in the brain organ of visual memory, it may be that the old plan, by which the chief part of every child's early education consisted in teaching him his letters, would give a word-blind child a better chance of improvement than do some of the modern methods.

If the defect be irremediable, the sooner this is recognized the better, both for him and his teachers. It would seem therefore, that the best way of detecting congenital word-blindness, and deciding whether, and to what extent, the defective faculty can be improved, is to stick to the old plan of teaching children their letters as early as possible. In cases in which great effort does not suffice to teach the child to read, it may be best, after reasonable efforts to teach him to read have been made, to educate him on other lines.

The detection of congenital word-blindness is easy in the children of well educated parents, whose young children receive much individual attention. It must be much more difficult, both to recognize and deal with, in the children who crowd our Infant Elementary Schools. That the condition has been differentiated, and is receiving attention from medical men, should lead presently to its being dealt with by tutors who devote themselves especially to backward children, and by the teachers in all Infant Schools. The education of "backward" and "defective" children, by more or less special methods, is already receiving more attention than formerly. If from among such children, those can be sifted whose only, or principal difficulty, is real inability to learn to read, the result cannot but be useful both to the individuals and the community.

In Memoriam

GILBERT E. PALEN, M.D.

Dr. Gilbert E. Palen of Philadelphia, a brother-in-law of the late Jay Gould, died on Sunday, July 28, 1901, at his cottage at Ocean City, N. J. He was born on May 3, 1832, at Palenville, N. Y., and on September 19, 1860, he married Miss Eliza Gould. Dr. Palen was graduated at Yale in 1853 and from the Albany Medical College with the class of 1855. Before and during the war he was an active abolitionist. He went to Philadelphia to practice medicine in 1877. A son, Dr. Gilbert J. Palen, and a daughter survive him.

FRED J. TOMPKINS, M.D.

Dr. Fred J. Tompkins died August 12, 1901, at his home, 112 Second avenue, Upper Troy, after an extended illness. He was one of the best known physicians of the upper section of the city, where he began his practice about twelve years ago. Dr. Tompkins was the son of William B. Tompkins and Hannah M. Weaver Tompkins, and was born in South Berne, Albany county, August 28, 1864. After his father's death in 1872 he went with the family to Central Bridge, Schoharie county. After receiving a common school education he began the study of medicine with Dr. Charles McCulloch in that village, and later with Dr. William Hailes of Albany. He was graduated from the Albany Medical College in 1885, and then took a post-graduate course in the medical department of McGill University at Montreal, Canada. He began to practice at Knox, Albany county, in 1886, and in 1888 settled in Lansingburgh, where he had since resided. Dr. Tompkins made many friends in this city and soon enjoyed a lucrative practice. In 1885 he married Miss Emma Updegrove of Albany, who with one son, Clifford E. Tompkins, survives him. Dr. Tompkins was a member of the Medical Society of Troy and Vicinity, the New York State Medical Association and the American Medical Association. He was a member of Phoenix Lodge, F. and A. M., Phoenix Chapter, R. A. M., and Diamond Rock Lodge, I. O. O. F.

HARRY ALVIN MERCHANT, M.D.

It is again our sad duty to record the death of a member of the class of 1897. Dr. Harry Alvin Merchant, of Monson, Massachusetts, died at his home, June 25, 1901, of pyæmia after a serious illness of several weeks. Earlier in the year a severe attack of grippe had left him in poor health, but he had struggled manfully on, doing his duty as best he could. Many a physician has met his death in the same heroic way. In attending a patient suffering from septic infection, for whom he had little hope of recovery, he contracted the disease. The patient lives—the physician dies a martyr to his work.

Dr. Merchant was born in Monson, August, 1866. He received his early education in the public schools, graduating from the Monson Academy in 1885. He entered upon a business career after graduating from the academy, and on November 11, 1891, he was married to Alice Fuller, daughter of Dr. George E. Fuller, who survives him with two children, George Fuller Merchant and Hattie Fuller Merchant. In the fall of 1894 he entered the Albany Medical College, graduating with his class in 1897. After graduating he immediately became associated with Dr. George Fuller and soon built up a large practice. Dr. Merchant was a member of the Eastern Hampden Medical Association and of the Massachusetts Medical Society. He was also a member of the Masons and of the Odd Fellows. In college he was one of the most active members of the Phi Sigma Kappa fraternity. So genial and happy was his disposition that in his earlier years he received the name of "Hap" Merchant. Throughout his college course he always had a word of encouragement for his fellows and when the class of '97 holds its first re-union no one will be more greatly missed. It was his desire to be present at the last commencement day, but his health did not permit it, and so he anticipated this pleasure for the next year. *Quid dies ferat incertum est.* Dr. Merchant was a loyal fellow, a ready friend, a loving father and a devoted husband.

H. JUDSON LIPES.

Public Health

Edited by Joseph D. Craig, M. D.

DEPARTMENT OF HEALTH—CITY OF ALBANY, N. Y.

ABSTRACT OF VITAL STATISTICS, JULY, 1901.

Deaths

Consumption.....	16	70 years and over.....	28
Diphtheria.....	1	1 year or under.....	34
Cholera infantum.....	8	Albany City Hospital.....	9
Bronchitis.....	2	Homœopathic Hospital.....	4
Pneumonia.....	2	County House.....	7
Apoplexy.....	9	St. Margaret's Home.....	2
Bright's disease.....	16	Home of the Friendless.....	1
Cancer.....	6	Home of the Aged.....	2
Accidents and violence.....	10	Total deaths.....	142
Heat prostration.....	12	Death rate July, 1901.....	16.06

SMALLPOX IN THE UNITED STATES

At the fifty-second annual meeting of the American Medical Association held in St. Paul, Minn., on June 4th, 5th, 6th, 7th, 1901, the section of Hygiene and Sanitary Science discussed the present epidemic of smallpox in the United States.

Among others who presented papers was Dr. T. J. Happell, of Trenton, Tenn. An abstract of his paper follows:

Dr. T. J. Happell, of Trenton, Tenn., said that last year he had reported to the section his experience based upon three hundred cases of pseudo, or modified smallpox, made from a bed-side study of the disease in all stages. He now spoke of some of the anomalies met with in four hundred cases that had recently come under his observation. In many instances the disease was non-communicable. Many vaccinated persons contracted the disease, whilst many who had not been vaccinated escaped. The following differential points were presented: In the modified form there did not appear to be any prevailing types of the disease, the cases differing only in degree. The incubation was from fourteen to eighteen days. In smallpox, the varieties were varioloid, discrete, hemorrhagic and confluent, and the incubation period was from fourteen to twenty-one days. The symptoms were stated to be as follows. From the first to the third day: In the modified form, at the onset the patient complained of cold, felt as though an attack of grippe or tonsillitis was coming on. The temperature was 102° - 105° F. There was little or no vomiting. The pulse was full and rapid. Little or no prostration, and no delirium were present. No convulsions occurred in the young. In a few cases there might be sleeplessness. In smallpox the onset was sudden, with violent chill, persistent vomiting, agonizing pain in the back and head, and shooting pains in the limbs. The temperature was 103° - 104° F. The pulse was full, strong and rapid. The prostration was great from the onset. The eyes were injected. Sleeplessness, delirium and convulsions occurred in the young. Third day: In modified smallpox no coarse red spots appeared. In smallpox coarse red spots appeared on the lips and forehead. With the appearance of these spots the temperature fell to the normal and the patient was comfortable. Fourth day: In the modified form an eruption appeared, whose character was generally that of an acne. In some rare instances the shot-like papules appeared. The temperature fell to the normal, and the patient almost invariably got up, if he had gone to bed, and said he was well. The eruption first appeared on the face: in men, about the forehead, cheek and chin; in women and children, irregularly about the face. There was usually a sore throat. In smallpox the small red spots appeared on the forehead at the margin of the hair, later on the extremities. Papules followed the red spots. They had a shot-like feel. Fifth day: In the modified form the acne-like eruption and papules developed into vesicles, which assumed an opalescence at once. These vesicles

were unicellular and were not umbilicated. The serum which exuded at their apices dried and turned brown, and this in some cases gave them the appearance of umbilication. There was no puckering of the vesicle at its border. The temperature was generally normal, unless it rose from abscess formation or other causes. The vesicle might dry up and the disease might be said to have aborted. A rapid recovery followed. In smallpox papules appeared on the wrist and forehead. Sixth to the ninth day: In the modified form the vesicles became filled with opaque lymphoid fluid; in some cases with a brown nucleus in the center which gave it an umbilicated appearance. This vesicle, with its opaque fluid, miscalled pus, shrank to half its diameter and became a thin brown scab, perfectly circular. The patient felt well and hungry after the appearance of the eruption. The latter occasionally affected the conjunctiva. There was no secondary fever. By the tenth day the skin might be entirely clear. In true smallpox vesicles appeared in place of papules, and the eruption spread gradually over the entire body. The vesicles were umbilicated and multilocular. On the eighth and ninth day the vesicles became pustular. Tenth to twelfth day: In smallpox pus oozed and formed scabs, and the stench was particularly bad. Seventeenth to twenty-first day: In smallpox the scabs dropped off, leaving red glistening pits which soon become white. Ulceration was deep. Ophthalmia was generally present. Pustules pervaded the mouth, larynx, pharynx and trachea. As to papules, in the modified form when these were present, they were the same size as in smallpox, perhaps a little smaller but fewer. There might be none. The vesicles ranged in size from the head of a pin to a split pea. They were not umbilicated, and when punctured, collapsed. The vesicle was unilocular. Convalescence began at the appearance of the eruption. The so-called pustule did not extend into the derma. The epidermis was the only structure of the skin involved. Hence there was no pitting. Those vaccinated contracted the disease. In smallpox the papules were about the size of a number four shot, and had a translucent appearance. They occurred on the entire body, including the palms and soles, appearing first on the face and hands. The vesicles were umbilicated and multilocular. So was the pustule, and neither would collapse in toto if pricked with a needle.

Dr. W. L. Beebe, of St. Cloud, Minn., stated that he had been identified with two epidemics, and though they were evidently both smallpox, they were very dissimilar in many characteristics. He thought that many of the recent cases had been diagnosticated "chickenpox" when they were really smallpox.

Dr. Heiman Spaulding, of Chicago, stated that none of those afflicted with the mild form of the disease contracted smallpox from the severer typical cases, where the exposure had been prolonged and certain in the wards. The mild form of the disease gave immunity from smallpox, and yet would transmit typical confluent or hemorrhagic smallpox.

Dr. J. M. March, of Canton, O., said he was of the firm conviction that the mild epidemics of the past few years, throughout the country, were those of Variola Vera.

Dr. J. A. Barr of Pennsylvania dwelt upon what one should consider successful vaccination. The scar present did not indicate successful vaccination. He thought only those repeatedly vaccinated could be said to have been successfully vaccinated. Taking 6,000 cases, it was found that fourteen per cent. were fatal among those who had been vaccinated once and eight per cent. of those vaccinated twice, and so on: it took as a rule four good scars to indicate immunity.

Dr. Martin, of Mississippi, took the ground that there were different varieties of smallpox, and that they bred true. He described several varieties with the popular names by which they were known: "Four Spot," "Yellows," "Stonepox," etc. He had traced sixteen cases, all similiar, to infection from a patient with identical lesions.

The Chairman was of the opinion that vaccination did protect against the mild cases described in the various papers, and placed before the section a resolution to the effect that the prevailing epidemics throughout the country were those of smallpox and should be treated as such. This was adopted by almost unanimous vote.

The above is from an abstract of the report of this section of the American Medical Association taken from the *Medical Record* of June 15, 1901.

It would seem as if an intelligent professor would no longer persist in calling these mild cases of smallpox, in the face of such evidence, chicken-pox. These cases are genuine smallpox of mild type. The Health Officer feels certain that a number of cases of smallpox of pronounced type were contracted from cases of smallpox of the mild type diagnosed as chicken-pox. There can be no question that the persons quarantined for mild smallpox were justly restrained in the interest of the Public Health as the type conformed exactly to the mild type described above by Dr. Happell of Trenton, Tenn.

Medical News

Edited by H. Judson Lipes, M. D.

THE ALBANY GUILD FOR THE CARE OF THE SICK POOR; STATISTICS FOR JULY, 1901.—Number of new cases, 36. *Classification of cases*: Dispensary case receiving home care, 1; district cases reported by health physicians, 3; charity cases reported by other physicians, 18; moderate income cases, 14. *Classification of diseases*: Medical, 18; surgical, 5; gynæcological, 11; skin, 2. (This general classification includes 9 maternity cases and 3 of diseases of the throat and nose). Number of contagious diseases in medical list, 2; number of patients removed to hospitals, 2; died, 6. *Visits of Guild Nurses*: Number of visits with nursing treatment, 473; for professional supervision of convalescents, 270; total number of visits in July, 743. Cases were reported to the Guild by 1 of the health physicians and by 17 other physicians.

DIVIDED EXAMINATIONS AUTHORIZED BY THE BOARD OF REGENTS OF THE STATE OF NEW YORK.—The Board of Regents of the University of the State of New York has instructed the Board of Medical Examiners that hereafter medical students or graduates who wish to be registered may be examined after two years of study at an approved medical school in hygiene, anatomy, physiology and chemistry, leaving the remainder of the examinations to be taken at the conclusion of the course of study. This change has long been desired, and will leave the students free to devote more time to clinical work during the last two years of the course than has heretofore been possible. We believe the work of the student will be better done and the fear of the examinations will soon be lost.

THE STATE ANTITOXIN LABORATORY.—A good building has been secured for the establishment of a State antitoxin laboratory in Albany. Dr. H. D. Pease, of the Sheffield Scientific School, Yale University, has been appointed director. The animal house will be provided with the most perfect hygienic conditions attainable for such purposes, and will be supplied with about fifteen horses for the manufacture of serum. The Commissioner of Health proposes to supply State institutions with diphtheria and other antitoxins free of cost, and also furnish these remedies to municipalities which are not already provided with a similar laboratory for patients who are unable to buy them. These new departments are intended to supply to all the health officers throughout the State the same facilities for investigation, diagnosis and treatment of infectious diseases as are now supplied by the city of New York.

A SANATORIUM FOR TUBERCULOUS CHILDREN IN ROME.—On the occasion of the birth of the daughter of the King of Italy, he donated 200,000 lire (\$40,000) toward a fund for the erection of a sanatorium for tuberculous children.

A VALUABLE PATHOLOGICAL LIBRARY FOR CORNELL UNIVERSITY.—It is stated that the library of the late Dr. Felix V. Birch-Hirschfeld, Professor of Pathology and Pathological Anatomy at the University of Leipzig and director of the Leipzig Pathological Institute, has been acquired by Cornell University. The library includes about 5,000 volumes and is one of the most valuable in existence in this particular field.

WOMEN DOCTORS OF GERMANY.—It is reported that two women have passed their State examination, hence are regular practising physicians of Germany. These are the first women to receive this honor, hence the event is of some interest. These two Berlin women, graduates of Halle University, have fulfilled all the legal requirements for a physician, and have studied the entire course in Germany. German women, who have studied medicine, have previously ranked as "Heilkunstler," not as regular physicians.

AMERICAN ELECTRO-THERAPEUTIC AND X-RAY ERA.—On June 15, 1901, appeared the initial number of this new journal, under the editorship of Dr. J. O. M. Hewitt, of Chicago. The *Era* will be the official organ of the Chicago Electro-Medical Society. Radiography and radiotherapy are

receiving considerable attention the world over and no doubt this new journal will be well received by the medical profession.

THE COLLEGE OF PHYSICIANS AND SURGEONS OF CHICAGO.—The secretary of the College of Physicians and Surgeons of Chicago announces that the administration of the college has suffered no serious disturbance in consequence of the fire which caused considerable damage to the old college building on the 25th of June last. In fact, they are better housed and equipped than ever before and running quite as smoothly.

THE JURY OF AWARDS ON MEDICAL EXHIBITS AT THE PAN-AMERICAN EXPOSITION.—With respect to all exhibits having to do with hygiene and sanitation, medicine and surgery, the jury of awards has just concluded its labors. The chairman of the jury was Capt. E. L. Munson, Assistant Surgeon, U. S. Army, whose recent book on military hygiene has been favorably received, and the members were Surgeon S. H. Griffiths, U. S. Navy, lately attached to the Naval Museum of Hygiene, Washington, D. C., and Prof. S. H. Woodbridge, Professor of Heating and Ventilation at the Massachusetts Institute of Technology, Boston, Mass., and now acting as government expert for the improvement of the ventilation of the Capitol building at Washington. A large number of exhibits were submitted to this jury for consideration, the awards being based upon the character and quality of the exhibits as actually made at the Exposition. The exhibits in the section on public health are said to have been found to be of a high degree of excellence.

MEDICAL EXCURSIONS TO WATERING PLACES.—Some years ago arrangements were made by which a party of physicians visited the principal watering places in France with the view of learning for themselves something as to the advantages offered by the various watering places. On these excursions special advantages are offered through the courtesy of the various spring owners, and lectures given by competent teachers upon the different places visited and the hydro-therapeutic values of the various springs. Special rates of fare are granted by the railways, a reduction of fifty per cent. being made in the price of tickets. Each tour generally lasts about ten or twelve days, the expedition this year beginning on September 1st and terminating on September 12th, the districts visited being those comprised in Dauphiny and Savoy. The scientific head of this trip will be Dr. Landouzy, professor at the Paris Faculty of Medicine. A similar excursion, covering the various health resorts and islands of the North Sea, has been arranged to start from Hamburg, Germany, during the last week in September for a trip of eleven days' duration. The subscription price for the French excursion is three hundred francs, and for the German excursion five pounds sterling. Physicians who intend accompanying the excursion should notify the secretary some time in advance. The secretary of the German excursion is Dr. W. A. Gilbert, Baden-Baden, and of the French, M. Carron de la Carriere, 2, Rue Lincoln, Paris.

Book Reviews

Practical Gynecology. By E. E. MONTGOMERY, M. D., Professor of Gynecology, Jefferson Medical College; Gynecologist to the Jefferson Medical College and Saint Joseph's Hospital; Consulting Gynecologist to the Philadelphia Lying-in Charity. Philadelphia: P. Blakiston's Son & Co. 1900.

The above volume presents a rather extensive contribution to the literature of gynecology, and, although there are already a number of excellent works on the subject, there is, nevertheless, room for such a comprehensive study of an important branch of surgery. The volume contains 819 pages and 527 illustrations. An attractive innovation in the art of book-making is the division into sections rather than chapters. Each section receives not only adequate treatment, but its relationship to the entire subject of gynecology is discussed. A brief introductory section leads up to the general subject of diagnosis, in which the significance of pain, vaginal discharge, hemorrhage, etc., is considered. Sections are devoted to pelvic and abdominal examination in which the various procedures employed in making a more or less positive diagnosis are described. A section entitled "Therapeutics" deals with the bacteriological side of gynecology; the preparation of instruments, sutures, dressings, the operating room, the operator and his assistants. This section also contains a discussion of the subject of anæsthesia, drainage, post-operative treatment, including the treatment of complications liable to occur. Brief sections are devoted to medical treatment, local therapeutics and electricity. The anatomy and physiology of the pelvic viscera are also briefly discussed. An especially satisfactory section is devoted to "Malformations," in which the different methods of treatment and operation advised for those conditions are described. A section on the general subject of pelvic inflammation is followed by one upon the subject of inflammation of the cervix and body of the uterus; the diagnosis, treatment and prognosis of these conditions being clearly set forth. Next in order follow sections upon deviations of the pelvic organs and genito-urinary hemorrhage and ectopic gestation, in which the etiology, diagnosis and treatment are satisfactorily discussed. The last two sections are devoted to "Genital Tumors" and "Ovarian Tumors" and are, perhaps, the most satisfactory sections of the volume, containing, as they do, a fairly exhaustive study of this interesting class of tumors. The treatment of these tumors also receives adequate attention; the vaginal and abdominal routes being discussed separately. The illustrations with which the volume is replete are unusually well executed and add very materially to the value of the work; in fact, there are very few works upon the subject of gynecology in which the illustrations are so satisfactory.

The care displayed in the arrangement of the subject matter reflects credit upon the author, while the typography and style of the book reflect

credit upon the publishers. To the student of medicine, the practising physician who does more or less gynecology, as well as the specialist in this line, this volume will be of much value and should receive the cordial support of the medical profession generally.

A. W. E.

Principles of Surgery. By N. SENN, M. D., Ph. D., LL. D., Professor of Surgery in Rush Medical College in Affiliation with the University of Chicago; Professorial Lecturer on Military Surgery in the University of Chicago; Attending Surgeon to the Presbyterian Hospital, etc. Third Edition. Philadelphia and Chicago: F. A. Davis Co. 1901.

The present edition of the above volume is by far the most satisfactory that has appeared, and presents in general the most modern views relating to the pathology of surgical diseases exclusive of tumors. The volume contains 700 pages and 230 illustrations and is subdivided into 27 chapters. In the opening chapters the process of regeneration of the different tissues is described, following which are chapters devoted to degeneration and inflammation, including a brief discussion of the treatment of inflammation. Chapter VI deals with the subject of pathogenic bacteria, the more important points concerning bacteria and their relationship to surgery being briefly discussed. Chapters VII and VIII are devoted to necrosis and include a discussion of the etiology, symptomatology, pathology and treatment of necroses. In chapters IX and X the author takes up the general subject of suppuration. In connection with etiology of suppurative processes a brief description is given of each of the more important pyogenic bacteria. The treatment of different forms of suppuration also receives brief consideration. Chapter XI contains a brief consideration of ulceration and fistula. Chapter XII deals with the subject of suppurative osteomyelitis and furnishes an excellent description of the disease and methods of treatment to be employed. In chapter XIII suppuration in large cavities and abscess of internal organs are discussed, the suppurative process in the pericardium, pleura, peritoneum and brain receiving especial attention. Chapters XIV and XV deal with septicæmia and pyæmia. Chapters XVI, XVII and XVIII contain a brief but comprehensive description of the essential features of erysipelas, tetanus and hydrophobia. The use of tetanus antitoxine both as a prophylactic and curative agent is advised. The importance and value of prophylactic inoculations in suspected cases of hydrophobia is also emphasized. In chapters XIX to XXIII inclusive, the author discusses in the most satisfactory manner the subject of surgical tuberculosis in practically all of its varied manifestations. The treatment of the different conditions is also adequately considered. Chapters XXIV and XXV are devoted to the subjects of actinomycosis and blastomycetic dermatitis and contain the essential facts gathered from the most recent literature on these subjects. The last two chapters in the book deal with anthrax and glanders and their importance as surgical diseases.

Taken as a whole the volume approximates more nearly Billroth's classical surgical pathology than any other work that has appeared in the English language, and will undoubtedly receive from the medical profession the recognition that it merits.

A. W. E.

Physical Diagnosis in Obstetrics. By EDWARD A. AYERS, M. D., Professor of Obstetrics in the New York Polyclinic; Attending Physician to the Mothers' and Babies' Hospital. New York: E. B. Treat & Co. 1901. Price \$2.00.

While the advance in obstetrical teaching has been particularly marked during the last decade, the general practitioner, as a rule, has been slow to make practical use of aseptic methods in midwifery. Preventative gynecology, generally speaking, means more careful technique in midwifery, and this includes not only the proper conduct of labor but also post-partum and ante-partum treatment. The day when the physician sees his patient for the first time when in labor, fortunately for all concerned, has passed. Since the introduction of abdominal palpation and pelvimetry, obstetrical work has been greatly improved and the ability to establish a complete diagnosis before labor provides for the prevention of many abnormalities which might otherwise prove fatal.

For those who are unable to pursue a practical course in midwifery, Dr. Ayers has produced a most excellent work, and the student could follow no better guide in the conduct of his labor cases.

This work, which was published in serial in *Obstetrics*, follows systematically the obstetrical history chart which the author uses and is not confined alone to physical diagnosis. While the chart is more extended than would be required in every case, all possible points of approach to diagnosis are given for the benefit of the student. The history of the patient is first considered in every point which might bear upon the case. Under "Ante-partum examination" much is called for which would be useless, except for statistics, in multipara whose previous labors had been normal.

All would not agree with the author as to the best method of controlling the delivery of the head through the vulva, nor as to the best method for the average practitioner for controlling uterine hemorrhage.

The arrangement of this work is quite novel, and for the purpose which is intended it can be most heartily recommended. H. JUDSON LIPES.

Pulmonary Consumption, Pneumonia and Allied Diseases of the Lungs; Their Etiology, Pathology and Treatment, with a Chapter on Physical Diagnosis. By THOMAS J. MAYS, M. D., Professor of Diseases of the Chest in the Philadelphia Polyclinic; Visiting Physician to Rush Hospital for Consumption. Illustrated. New York: E. B. Treat & Company, 241-243 West 23rd street. 1901.

This book is properly a thesis treating of the factors in the immunity against tuberculosis. In his preface the author has stated the principles involved in the following propositions: (1) that pulmonary phthisis in the large majority of cases is primarily a neurosis; (2) that any agent, influence or condition which undermines the integrity of the nervous system will engender pulmonary phthisis, or some other form of pulmonary disorder; (3) that the only remedies of value in the treatment of pulmonary phthisis are those which appeal to, and act through, the nervous system;

(4) that of special value in the treatment of phthisis is the counter-irritant action of silver nitrate introduced hypodermatically over the vagi in the neck; and (5) that acute pneumonia, and other forms of acute pulmonary disease, are closely affiliated with disease of the nervous system.

What the elements may be which predispose one man at one time to an attack of disease, and at other times render him immune, or what the differences in individuals may be which render some susceptible and protect others, are questions which even the great mass of bacteriological knowledge has not yet been able to answer. The all-controlling influence of the nervous system is not unreasonably invoked to explain this great problem, which lies at the bottom of all vital existence, but no proof of its power, which would be regarded as scientifically exact, has yet been adduced. Dr. Mays has scanned well the literature, and has compiled all which bears upon this subject in a most industrious and most painstaking way. His researches into the relations of nervous conditions with each other, both in the individual and in the family, have been far-reaching, and there is probably no other work in which the exploitation of what has sometimes been called the "transformation of neuroses" has been so thoroughly done. The presence of insanity, epilepsy, or other functional or organic disease of the nervous system, with the different manifestations of tuberculosis, in the same individual or in the same family, has given rise to much conjecture. It has long been known that pulmonary diseases have flourished in institutions for the insane, in prisons, or in other places where defective people have been in close contact. And it has also long been believed that some definite inter-relations between these diseases must exist. But recent advances in the understanding of the contagiousness of tubercular diseases have led to marked changes in these conditions, and the last few years have shown a marked decrease in tuberculosis in institutions where proper quarantine and isolation have been carried out. As to the predisposing factors there is little definite to be said. Dr. Mays marshals all the arguments in favor of the neurotic theory, and presents these facts in a readable and attractive manner, but it cannot be said that he has proved his case. His work is open to criticism in that the exciting causes are subordinated to the predisposing causes, and the modern conception of an infective agent in tuberculous disease is not given its true value.

A System of Physiologic Therapeutics. A Practical Exposition of the Methods, Other than Drug-Giving, Useful in the Treatment of the Sick. Edited by SOLOMON SOLIS COHEN, A. M., M. D., Professor of Medicine and Therapeutics in the Philadelphia Polyclinic; Lecturer on Clinical Medicine at Jefferson Medical College, etc. Volumes I and II, *Electrotherapy*, by GEORGE W. JACOBY, M. D., Consulting Neurologist to the German Hospital, New York City; to the Infirmary for Women and Children, etc. In Two Books. Illustrated. Published by P. Blakiston's Son & Co., 1012 Walnut St., Philadelphia, Pa. Price, Eleven Volumes, \$22.00 net.

The purposes of this "system" are indicated in the title, the first two volumes consisting of a treatise on electricity, by Dr. George W. Jacoby. The

first of these, covering 242 pages, includes electrophysics, and descriptions of the apparatus required for the therapeutic and diagnostic uses of electricity, and the second, of 323 pages, includes electrophysiology and electropathology, electrodiagnosis and electroprognosis, general and special electrotherapeutics and addenda. The addenda are contributions by specialists upon electrolysis, cataphoresis, X-ray therapy, the surgical uses of electricity, electricity in diseases of the eye, nose, throat and ear, electricity in gynecology and the electric treatment of skin diseases. Exclusive of the "Addenda," the second volume comprises 202 pages. Of these 202 pages 53 deal with the general effects of electricity upon the body, 45 with the interpretation of these effects in diagnosis and prognosis, and 80 pages with electrotherapeutics. Thus in two volumes of a total of 565 pages on "Electrotherapy," eighty pages, or one-seventh, treat of the subject-matter proper of the title. The author has been conservative in this portion of the work, and this ratio probably represents the true value of electricity therapeutically. Apart from the "psychic" effects in hysteria and neurasthenia, and the nutritional effects in diseases of the peripheral neuron, there is little unqualified endorsement of this agent. Among the contributions to the "Addenda" the use of the electro-cautery in surgery, particularly in the surgery of the nose and throat, and of the female generative organs, takes a prominent place. Electrolysis in dermatology is fully exploited by Dr. Ohmann-Dumesnil, and Dr. Edward Jackson describes the great value of electricity in the removal of embedded powder-grains, after the method first described by him in the *ALBANY MEDICAL ANNALS* of May, 1897. The description of the reaction of degeneration is especially well done. The author shows here more decidedly than is usual that the essential feature of the reaction of degeneration is the character of the muscular contraction. He also emphasizes the fact that the reaction of degeneration is not an invariable accompaniment of the Wallerian degeneration, and thus places this symptom in a more subordinate place than has been usual, but much nearer its true value. The motor points are illustrated by plates taken from the recent German work of Toby Cohn, and the text of Toby Cohn has been adapted to descriptive tables. This is hardly an improvement, as there is not in English any detailed work descriptive of the methods of reaching the motor points and securing the normal and abnormal reactions which are so carefully elaborated by the Germans. Another feature of this book which is of immediate importance is the description of the use of electricity derived from currents in the mains of cities, which has been suggested and carefully described in the recent volume by Hedley.

In a general way it may be said that Dr. Jacoby has covered in a conservative spirit the present status of electricity in medicine, and that the limited uses of this agent are shown faithfully, and without the undue enthusiasm which is so often associated with modern work in medical electricity.

Current Medical Literature

MEDICINE

Edited by Samuel B. Ward, M. D.

Sensory Disturbances of the Skin in Diseases of the Stomach. (Ueber Sensibilitätsstörungen der Haut bei Magenkrankheiten.)

HAENEL. *Muenchener medicinische Wochenschrift*, January 1, 1901.

The author confirms Head's conclusions, and finds that the dorsal areas 7-9 are most commonly affected in diseases of the stomach. At times, however, the hyperalgesia extends beyond these zones. A hyperalgesia of the arm, especially on the inner surface of the arm and over the deltoid muscle, does not negative disease of the stomach. This method is not of value for differential diagnosis between ulcer and functional disease of the stomach. The two points sensitive to pressure described by Boas, one to the left and the other to the right of the twelfth dorsal vertebra, are found to exactly coincide with the two maxima of Head, while the sensitive point in the epigastrium is probably also a reflex hyperalgesia rather than due to direct pressure. The writer gives brief histories and the localization of the hyperalgesia in five cases of disease of the stomach. The areas of pain coincide with the deductions of Head.

The Treatment of Typhoid Fever with Jez's Anti-Typhoid Extract. (Zur Therapie des Abdominaltyphus mit Jez's Antityphusextract.)

VALENTINE JEZ and FRANZ KLUK-KLUCZYCKI. *Wiener klinische Wochenschrift*, 1901, No. 4.

The authors report upon continued observations with Jez's extract, the first contribution having been published in 1899. Jez's extract is derived from the blood of animals which have been immunized to typhoid, and may be regarded as a typhoid antitoxine, obtained from the spleen, bone marrow, brain, spinal cord and thymus. The extract is administered in doses commensurate with the severity of the case. At first one or two tablespoonfuls are given every hour or two hours until the first remission of the fever; then the same quantity is given every three hours until the temperature is reduced to thirty-eight degrees; after this the administration is continued thrice daily, so that the whole amount needed for one patient is approximately four hundred to five hundred centimetres. The writers report cases to show the favorable influence of the extract upon the course of the typhoid fever. The temperature is kept under control, the spleen does not enlarge, the roseola is less abundant, the action of the heart is stronger and the heart sounds are louder, the pulse in both rapidity and strength improves, and the mental symptoms are lessened in severity. The course of the disease is shortened and thus made much more bearable. From the fact that the extract was not used in the authors' cases until the diagnosis had been verified, it would seem that it may be effective when the disease is well developed. The extract was used without effect in cases of cerebro-spinal meningitis, tubercular meningitis and pneumonia.

From their observations the authors derive the following conclusions:

1. Jez's anti-typhoid extract is a therapeutic preparation possessing a specific action only against the typhoid bacillus.
2. It is a harmless agent, which may be given in large doses. The use of large doses is not attended by unfavorable manifestations.
3. It aids in the differential diagnosis.
4. Used uninterruptedly in typhoid fever it reduces the temperature and increases the strength of the pulse.
5. It shortens the length of the attack and fully neutralizes the effects of which so often follow the use of subcutaneous injections.
6. Administered by the mouth, it produces no unfavorable results which so often follow the use of subcutaneous injections.

The Mechanical Treatment of Anasarca, and Researches Upon the Chemical Constituents of the Fluid of Œdema. (Ein Apparat zur mechanischen Behandlung des Hydrops anasarca und Untersuchungen über die chemische Zusammensetzung der Œdemflüssigkeit.)

KARL DEHIO. *St. Petersburger medicinische Wochenschrift*, 1900, No. 51.

The author reviews the literature of the treatment of anasarca by incisions, which has been a practice since the days of Hippocrates, and calls attention to the difficulties attending the operation, which are those arising from the danger of infection. The various forms of apparatus have been unsatisfactory, and he describes an invention of his own which is planned to overcome the objections. This simple apparatus consists of an elastic bandage about ten centimetres wide and 120 centimetres long. In its long axis the bandage is divided for about three-fourths of its length into two equally wide tongues, which serve for fastening. In the centre of the band is a circular opening about eight centimetres in diameter, in which is securely fastened a funnel-shaped receptacle, so that it makes one solid piece with the bandage. At the point of insertion of this vessel the bandage is broadened. The funnel itself terminates in a rubber tube so arranged that the accumulating fluid may be discharged into a vessel lying underneath. If advisable, another tube may be inserted into the funnel so that the latter may be subjected to a current of water. The principle of this arrangement consists in the fact that the apparatus may be applied to the incised skin, and so permits the discharge of the fluid, and at the same time prevents infection from the air. The writer describes the method of operation, which consists in making, under strictest antiseptic precaution, three parallel incisions, two or three centimetres in length, through the skin, but not into the subcutaneous connective tissue. The elastic bandage is then applied transversely, and the tailed ends are wound about the edges of the funnel so that it is firmly applied to the limb, without any openings at the point of contact. If there be pronounced œdema, this apparatus provides for the discharge of from ten to twelve litres of fluid in twenty-four hours.

The author further urges that this operation should be given a regular place in the treatment of anasarca, and should not be reserved as a last resort. His paper concludes with a report upon the chemical analyses of dropsical fluid.

Pneumococcic Endocarditis. (Zur Endocarditis pneumococcica.)

HENKE. *Archiv für pathologische Anatomie und Physiologie und für klinische Medizin. Band 163, Heft 1.*

The author has made a study of the endocarditis which accompanies or follows pneumonia, and which is due to the pneumococcus. Clinically he states that this endocarditis is rather rare; that in 254 cases of pneumonia observed in the Tübingen Clinic only one was observed to have endocarditis. Weichselbaum claims that in thirty-three cases of endocarditis examined bacteriologically, seven were due to the pneumococcus. Osler states that twenty-five per cent. of the cases of malignant endocarditis are due to the pneumococcus. The newest investigations of Harbitz showed five out of forty-three cases of infectious endocarditis caused by the pneumococcus.

The author brings up the question as to whether the pneumococcic endocarditis has any special anatomical peculiarities. He states that some authors, such as Weichselbaum, claim that it has. It is said that the right side of the heart is attacked with an unusual degree of frequency, and that on the left side the aortic valve is much more frequently attacked than the mitral. Emboli and infarct production are said to be unusual. In many cases a pneumococcus cerebro-spinal meningitis is found.

The author was unable in his own observations to make out that the pneumococcic endocarditis gave rise to any special anatomical picture. He found that from a clinical standpoint the disease was usually of a sudden onset, and that it was frequently not diagnosed. The prognosis is especially bad in alcoholics.

The Etiology of Liver Abscesses. (Zur Aetiologie der Leberabscesse.)

G. KOBLER. *Archiv für pathologische Anatomie und Physiologie und für klinische Medizin. Band 163, Heft 1.*

The author reviews the subject of the etiology of liver abscesses, both in pre-antiseptic times and at the present, and lays special stress upon the relation of dysentery to liver abscess. He cites numerous authorities, some of whom believe that dysentery plays an important rôle in the production of liver abscess, whilst others believe that the liver abscess causes the dysentery. He shows that in pre-antiseptic days a large number of cases of liver abscess were due to pyæmia, and following this, inflammation of the portal vein seems to play a most important rôle. In the present time, in temperate climates, occlusion of the gall passages and pylephlebitis play the most important rôle, whilst the cases due to pyæmia are very much diminished in number. The author then publishes ten cases of liver abscess of his own which occurred in Bosnia. He showed that in eight of these cases the disease followed dysentery. He also mentions some statistics by Schweiger, also in Bosnia, which showed that dysentery was the cause of twenty out of twenty-six cases. This latter observer traced the dysentery to impure water supply, for as soon as the water supply was changed both the dysentery and liver abscesses diminished remarkably in occurrence. As a result of his observations, the

author comes to the conclusion that different factors play a rôle in the production of liver abscesses in different parts of the world, and that in Bosnia, at any rate, dysentery is by far the commonest factor in the production of this condition.

NEUROLOGY

Edited by Henry Hun, M. D.

A Case of Extensive Actinomycosis with a Localization in the Brain.
(*Ein Fall von ausgebreiteter Aktinomykose mit Lokalisation im Gehirn.*)

W. NIKITIN. *Deutsche medicinische Wochenschrift*, No. 38, 1900.

Bollinger, in 1876, first called attention to this peculiar disease as affecting cattle, and in 1878 Israel described two cases occurring in the human subject. At the present time there are more than forty cases in the literature of the subject. There are only a small number of cases known in which the ray-fungus got into the brain. The author describes a case of actinomycosis occurring in a woman, aged 37, in which the affection started in the respiratory apparatus, then extended to the skin and subcutaneous cellular tissue, and finally to the brain. The case was first seen in December, 1897, and at that time the woman complained of a dry cough and tickling in the throat. Examination showed the presence of chronic pharyngitis, and an enlargement of the lingual tonsil. Later a circumscribed broncho-pneumonia developed at the apex of the left lung, with night sweats and some fever. Six weeks after the onset of the attack the patient complained of severe pain under the left clavicle, and two days later a swelling appeared over the region of the rib. On deep pressure, there was some fluctuation. The abscess was opened and a considerable quantity of pus evacuated. The wound did not heal, and in few weeks a second abscess developed near the first. This was also opened and the diagnosis of actinomycosis was verified on examination of the serous discharge. Potassium iodide was given in large doses, but did not influence the course of the disease. After this small painful tumors developed on different parts of the skin, and on examination of their contents, the typical granules were found. Her condition remained about the same until about a year from the beginning of the attack, when she suddenly became dizzy, lost consciousness for a short time, and developed muscular spasms of the right side of the face and of the right arm and leg. The patient had repeated attacks of this sort during the next four months, but was not unconscious each time. Several days before death, violent headaches, limited to the left side of the head, a paralysis of the right facial and right arm, and aphasia, developed. A complete autopsy was not allowed, so that only the brain was examined. The arachnoid was thickened in the region of the vessels, and the vessels of the arachnoid and pia mater were filled with blood. The pia could be easily pulled off of the brain substance. In the middle of the surface of the left hemisphere in the posterior part of the frontal lobe, and in the anterior portion of the parietal lobe, a node as large as a large walnut was found. The pia was adherent to this. The node was made up of firm tissue, grayish white in color, and was penetrated by fistulous tracts containing a thick green pus. Just below this node, in the white matter of the parietal lobe, an abscess as large as a small walnut, filled with pus of the same character,

was found. In the pus many granules and actinomyces were discovered. In the region of the node and abscess, the brain substance was very soft, of a yellowish color, and contained many small hæmorrhagic areas. The gray matter was of a light rose color, and the white contained a number of red dots and lines. The ganglia, cerebellum, and medulla showed the same peculiarities as the white and gray matter of the cerebral hemispheres. The jaws and cavity of the mouth were not involved. The disease undoubtedly started in the lungs, and extended from there by way of the lymph and blood vessels. The case demonstrates that even a prolonged administration of potassium iodide, in large doses, does not appear to influence the extension of the disease.

A Case of Myelitis Apoplectica. (Ueber ein Fall von Myelitis apoplectica.)
GEORG FLATAU. *Centralblatt für Nervenheilkunde und Psychiatrie*, Bd. XII, No. 132, 13 January, 1901.

The patient was a belt-maker, thirty-six years of age, who, in his sixteenth year, had suffered from an abscess in the upper jaw and antrum, and two months later developed, suddenly one morning, numbness in the right lower extremity and paralysis of both left extremities. Fourteen days later he was unable to empty voluntarily either the bladder or rectum. In the course of five months, the control of the left lower limb was almost completely restored, and the use of the left hand was improved. The patient came under the observation of the writer in 1899, twenty years after the initial disease. The left lower limb showed arrested development, without paralytic symptoms. Lack of growth was also noted in the left upper extremity, and was plainly shown in the bones by the X-rays. There was also attenuation of some of the muscles, which showed an electrical degenerative reaction. The flexors of the fingers were slightly involved, indicating a nuclear disturbance in the eighth cervical segment. There was also narrowing of the left pupil and the lid-interval, indicating an extension downward to the first dorsal segment. The combination of this motor disturbance of the left side with sensory symptoms of the right side, indicated a lesion of the Brown-Séquard type. In the case under observation, this was more marked at first, and the symptoms were more diffuse than later, when they became more localized. The remains of the symptoms in the left lower extremity were shown in partial lack of development, and in spastic symptoms, as the Babinski phenomenon, pointing toward a lesion of the lateral tracts. The lesion then, was primarily focussed in the anterior horns of the cord at a level between the seventh cervical and first dorsal segments, and extended from here into the crossed pyramidal tracts of the left side. The diseases to which these symptoms might be referred are pre-eminently hæmatomyelia, acute myelitis and infantile paralysis of adults. The acute onset of the disease, and the character of the symptoms, point to hæmatomyelia, which is closely allied to spinal apoplexy. Furthermore, the subsidence of some of the symptoms which might have been ascribed to pressure from a hæmatomyelia, are consistent with the theory of this lesion. The case was almost too acute for myelitis, and the symptoms were not consistent, either in their distribution, or in their development and subsequent course, for anterior polio-

myelitis. The probable ætiology also to some extent supports the theory of an apoplectic condition. There was a preceding abscess in the superior maxilla, from which an infection might have arisen to affect a distant point, as the spinal cord. Whether this infection partook of the character of a direct invasion of bacteria, or whether it was a toxic condition, cannot be determined. The author, in conclusion, refers to the paucity of the literature upon the subject, and finds no case in which apoplectic myelitis has followed upon an abscess of the antrum of Highmore.

PATHOLOGY

Edited by George Blumer, M. D.

Concerning Immunity against Malaria. (Ueber Immunität gegen Malaria.)
MAX GLOGNER. *Archiv für pathologische Anatomie und Physiologie und für klinische Medizin*, Bd. 162, Heft. 2.

Glogner's article is a refutation and a criticism of Koch's recent statement, that malaria produces immunity. Glogner produces statistics from several sources to prove that malaria does not produce immunity, but that, on the contrary, one attack predisposes to further ones. Glogner's first point is that if malaria produces immunity, the children of natives who have lived in a malarious district for generations, should be more or less immune. He shows that this is not at all the case, as in some districts one hundred per cent. of the children under two years have malaria, and the lowest figures quoted are eighty per cent.

He next compares the relative morbidity and mortality from malaria in the native and Dutch troops in the Dutch Indies, and shows that whilst the morbidity among the native soldiers is slightly lower than that amongst the Dutch, the mortality is higher.

He finally studies the statistics of recurrent attacks of malaria in children in an orphan asylum in the Dutch Indies. He shows that exactly the opposite condition prevails to what one would expect if an immunity was produced, namely, that one attack renders the subject more rather than less liable. He admits the fact that occasional individuals, both native and European, exist, who possess a natural immunity against malaria. He implies that the conclusions of the German Malaria Commission regarding immunity were based upon an insufficient understanding of the local conditions and an unscientific handling of figures.

Further Researches Concerning the Influence of Sterilized Air on Animals. (Weitere Untersuchungen über den Einfluss Sterilizter Luft auf Thiere.)

J. T. KIJANITZIN. *Virchow's Archiv*, Bd. 162, Heft 3.

The author made a series of experiments with animals, in which he made them breathe sterilized air instead of ordinary air. He did this by means of a complicated apparatus. He found that the animals died quite rapidly. He provided for ventilation, so that the animals could not have poisoned themselves with their own gaseous excreta. The animals received no food during the experiments, but he showed that they died

much more rapidly than animals which were merely starved, and did not lose half as much weight. He showed that death was not due to changes in the air produced by the sterilization, which was produced by heat. He therefore concluded that some other factor than self-poisoning, starvation, or chemical changes in the air produced death, and his conclusions briefly stated are these: Besides the oxygen of the air and the other normal chemical constituents, there must be present, to ensure life, certain micro-organisms. These organisms enter the blood during the air interchange in the lungs, but do not appear in the circulating blood, as they are immediately taken up by leucocytes. After they are digested by the leucocytes they give rise to oxydizing ferments, without which the normal process of oxyditation rapidly diminishes, and, as a result, we have the formation of a large number of incomplete intermediate oxidation products (*i. e.*, leucomaines), which cause the death of the animal.

A Contribution to the Study of the Hereditary Transmission of Tuberculosis through the Placenta. (Beitrag zum Studium der erblichen Uebertragung der Tuberkulose durch die Placenta.)

G. D'ARRIGO. *Centralblatt für Bakteriologie*, Bd. XXVIII, No. 20.

D'Arrigo discusses the question of the hereditary transmission of tuberculosis, and goes over the literature very thoroughly. He states that the object of his investigations in this paper were merely to find out whether the tubercle bacillus was transmitted to the foetus through the placenta. For this purpose he used guinea pigs, which he sometimes inoculated before and sometimes during gestation. As a result of his investigation he comes to the following conclusions:

1. Guinea pigs who become pregnant during an attack of tuberculosis sometimes abort, but usually the pregnancy progresses naturally.

2. In the placenta and foetus of guinea pigs which are examined from the sixteenth day of pregnancy up to a short time from the termination, there are to be found histological lesions, spores, and tubercle bacilli. The earlier in pregnancy the animal is sacrificed, the slighter the tuberculous lesion. One can say that up to the end of the first half of gestation, only a few spores pass through the placenta, whilst after the first half, lesions in the placenta become more and more marked, and the bacilli themselves pass through.

3. In the organs of young guinea pigs which have developed in the uterus of tuberculous guinea pigs and are born at the usual time, there are to be found, especially in the liver, tuberculous lesions, and one can always find spores and bacilli. These young guinea pigs are always weak and thin, and die very soon after birth of general tuberculosis.

4. Impregnated guinea pigs which are inoculated with tuberculosis generally abort, and very seldom go on to the end of pregnancy. One does not find in the placenta of these guinea pigs either bacilli or spores, and it is probable that the abortion is due to the action of the tuberculous poison upon the placenta. It is not easy to understand why abortion is more seldom in guinea pigs who become pregnant during the course of tuberculous infection. Perhaps it is because the embryo which has developed in an already infected organism, becomes accustomed to the poison.

ALBANY MEDICAL ANNALS

Original Communications

THE DEVELOPMENT OF MEDICINE AND SURGERY IN THE ALBANY HOSPITAL.*

By ALBERT VANDER VEER, M. D.,

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Surgery, Albany Medical College.

A few years since commercial circles were surprised to learn of the assignment of one of the oldest and most respected wholesale houses in the great metropolis of New York, and further disappointment was realized when it was known that the firm would be unable to pay but a small percentage in redemption of debts. This assignment was discussed at some length in the financial columns of the daily papers, and it was stated that there was found in their store and warehouses a great quantity of valuable and rich but unsalable goods. These goods, it was said, were pronounced out of date and unfashionable, and that their methods of doing business had not kept abreast of modern ways. They had inventoried stock from year to year as valuable assets, which, in reality, was worth but little when brought down to a cash basis.

These prefatory remarks will be elaborated a little later on in my paper.

Albany, for many years, has been a well-recognized surgical centre. Being one of the oldest chartered cities in this country it was but natural that the first settlers saw the necessity of hav-

*An address delivered at the opening of a summer course of clinical lectures to practitioners in medicine and surgery, at the Albany Hospital, July 2, 1901.

ing with them the best of medical attendants, and if we study carefully the history of the early settlement of Fort Orange we can clearly understand that the very best surgeons and physicians came here very soon after the city was established. From that time on there is a clear history of the location here of prominent physicians and surgeons, so that at no time has there been any loss of that reputation which the city has deserved, and which has been granted it by larger cities in this country. This gradual development of intelligent medical practice was recognized during the Revolutionary war, the War of 1812, the Indian wars, the Mexican war, and especially so during the Civil war. In the early decades of the nineteenth century so well established had become the reputation of the Albany physicians and surgeons that it was not difficult—although meeting with prompt opposition at first from rival institutions in the state—to establish here a medical college. This soon led to the organization of the Albany Hospital in 1849, an institution that when once well established on the corner of Howard and Eagle streets, attracted much attention from the neighboring cities, receiving many visitors, especially from the medical profession, and developing a most excellent influence upon surgical work here as well as in the adjoining country villages and cities. The old hospital, as we now call it, was very conveniently located, and until the city was built up more thoroughly, presented very many attractive features.

It was in this building that the principle of establishing private rooms for the treatment of private patients was first developed, a feature that is now adopted by all modern hospitals. Another excellent innovation some time later was the recognition of all reputable physicians to treat their cases in the private rooms and private wards, under proper rules and regulations. This feature has done much to accommodate members of the profession who were not connected with the charity work of the hospital, but who were entitled to consideration, and in their friendship and good feeling for the hospital has done much to keep the institution in touch with the public at large. The old hospital has certainly accomplished a vast amount of excellent work.

It is not generally known, that in this institution Dr. James H. Armsby, on two occasions, tied successfully the left sub-clavian artery, and his patients recovered, this being in the days when aseptic surgery was unknown. Dr. Alden March did some excel-

lent and very creditable work there. It is true that he was among the first to undertake abdominal surgery, but was obliged to give it up because of the want of proper technique and the unsanitary condition of the hospital, but he did many other very important operations, and had a fair degree of success. I was personally acquainted with his views in regard to hospital work, and how earnestly he endeavored to overcome the danger of erysipelas and infection. I call to mind several conversations held with him, when carbolic acid was first introduced, and it was thought then we might have an antidote to such serious enemies as erysipelas and hospital gangrene. He was acquainted with some of Pasteur's early investigations, had read of Tyndale's experiments, and was just beginning to read of Lister's work when his life's duties ended. Dr. March was a progressive man. I have often stated in my lectures that so far as the art of surgery was concerned he was the peer of any of the younger men living at the present time. His operations were done as successfully and much more quickly than our operations are done at present, but in the science of modern aseptic surgery it was not given him to know the things with which we are now so conversant.

Dr. Hoff, the father of our present Col. John V. Hoff, assistant surgeon general, was one of the earliest members connected with the old hospital, and it was in that institution that Dr. Swinburne made his reputation for his persistent efforts to demonstrate the principle of extension and counter-extension in the treatment of fractures. Dr. James McNaughton brought and gave to the old hospital a grand reputation because of his position as an anatomist, there being none to excel him at that time. I well remember, in 1860-'61, listening to the clinical lectures of Dr. Howard Townsend, while going through the wards, in reference to the, then, new discovery of so-called Bright's disease of the kidneys. What a pleasure it is to realize that the classification of disease of the kidneys of to-day, is the outgrowth of the work of men who have been such careful observers as Dr. Howard Townsend and Dr. S. Oakley Vander Poel.

The old hospital had for its medical and surgical staff some of the brightest men in this country: Dr. Thomas Hun, Dr. James P. Boyd, Dr. Mason F. Cogswell, Dr. S. Oakley Vander Poel, Dr. U. G. Bigelow, Dr. J. R. Boulware, Dr. James E. Pomfret, Dr. Joseph Lewi, Dr. Jacob S. Mosher, Dr. John V. Lansing and

others whom I might mention, but the record of whose work is to be found in our medical publications.

Dr. March's early work in the study of military surgery is to be noted in the very excellent collection of specimens found in the Museum of the Albany Medical College. He was one of the earliest of our civilian surgeons who went to the front and rendered service in the first year of the Civil war. It was nearly the last of his professional work, for he was taken sick soon after and passed to his reward. This reference to Dr. March I present as an example of his progressive mind and desire to keep abreast of the best ideas of thinking men, not letting profession stock accumulate on the shelves.

Dr. Swinburne was also one of the early volunteer surgeons who went to the front during the severe fighting in Virginia, and who made there an effort to elucidate and demonstrate the conservatism of resection of fractured bones. Although his percentage of recoveries was not encouraging, yet under our new aseptic methods it has become a well-recognized procedure in the treatment of such cases. So excellent a reputation had the Albany hospital established at that time that the State made use of this institution for the treatment of the sick soldiers. One of the first military hospitals established during the Civil war was the Ira Harris Hospital, located near the ground we now occupy, where nearly 300 of the wounded soldiers from the battle fields of Fair Oaks, Malvern Hill and the Peninsula were received.

Dr. March's reputation, together with that of the surgeons in connection with the Albany Hospital, was largely instrumental in establishing this military hospital. As I remember Dr. Armsby had little to do with it, being Minister to Italy at that time. The organization of this hospital, and its administration, was a credit to the physicians and surgeons of that day. Dr. Alden March, Dr. Thomas Hun, Dr. S. Oakley Vander Poel, Dr. Hoff, Dr. Henry March, Dr. S. H. Freeman, Dr. J. V. Lansing, Dr. Mason F. Cogswell, Dr. James McNaughton, Dr. Charles Smith and others, together with cadets Husted, Pruyn, Camp, Bonesteel, Fry, Vander Veer and others, were instrumental in doing much good for the benefit of the volunteer soldiers. I remember well the appearance of the wounded as they were brought from the night boat, and from the cars, and it produced a most profound impression upon our young men of that day. The citizens of

Albany did all that could be required of them in the transportation and care of the wounded. We did not then have our well-paved streets, but the seriously wounded were moved with great care, and I shall ever have a vivid recollection of their appearance. We had hospital gangrene, sloughing wounds, suppuration and abscesses to deal with. Drainage at that time was little known, the weather was hot and many of the wounds contained maggots. Opening of sinuses and of fresh abscesses was almost our daily duty. Dressing the wounds twice a day became necessary, washing out with Labarraque's solution of chlorinate of soda, applying compress and bandage to close pockets of pus, secondary operations for osteomyelitis, and amputations for wounds of important joints, where an effort to save had failed—and was almost sure to fail, because of the serious amount of destruction from suppuration; our operations done at that time without any knowledge of asepsis; silk ligatures were used, enough left to hang out of the wound and to be removed at the end of the twelfth or fourteenth day by continued traction. All of this work was greatly aided by the very efficient efforts of the Misses Cary and other competent volunteer female nurses.

This is but a short chapter in the care of the wounded of that great war, but illustrates fully the confidence placed in Albany surgery, and in the Albany Hospital. Surely! no city could have done better than did the citizens of Albany in the preparation of lint, old linen and muslin for operations and dressings. Not only did the ladies have their afternoons for scraping and preparing lint, but they packed boxes and barrels and gave freely to the larger hospitals at the front. Well do I remember an incident that occurred to me after the battle of Antietam, when in treating the wounded at Washington, a barrel of dressing was brought into the ward and when opened the first garment I took out was one of my own shirts, which I had donated before leaving Albany. There was certainly no doubt in my mind of this contribution having reached its proper destination.

Albany has also a reputation for the establishment of hospitals during the epidemic of cholera in 1832, when such men as Dr. Thomas Hun, Dr. James McNaughton, Drs. Barent P. and Peter P. Staats, Dr. Simeon Snow and others gave cheerfully of their time and talents in caring for the sick in an intelligent manner. Dr. Snow represented a class of men who came from the sur-

rounding country to observe the methods of treatment, just as do members of our profession to-day, to take post-graduate courses, or attend the line of work marked out in our prospectus, where we hope to impart some new principle in methods of practice—not to hand out old stock from musty, overloaded and decaying shelves.

When requested to give the opening address in this course I felt somewhat reluctant to undertake it. I have labored many years as a member of the staff of this hospital, and for some time I have felt that, as occasion presented, I would be glad to relinquish my duties and give way to younger men. I have seen the profession of surgery, while connected with this institution, develop into an entirely new science. The profession of surgery as an art, as I have said before, probably has not developed beyond the possibility of what was being done, or could be done, fifty or one hundred years ago, but as a science it has developed new and improved methods which have required constant, continuous service from those who were following out the new ideas, and keeping abreast of modern work. This has made the work of the surgeon for the past twenty-five or thirty years exceedingly arduous. It gave him very little time for anything outside of his real professional work. Changes were so rapid, so continuous, so absolutely essential, that his odd hours must necessarily be given to investigation and study of the development of some new principle of modern aseptic surgery. Shelves for storage were not required. New thoughts were put into immediate use, and satisfactory results so usually followed, that one had but to select, improve, and then to find plenty to do.

I have thought well to record and relate a few of my personal observations in connection with the Albany Hospital. The medical and surgical staff, and the specialists appointed, have been men who were earnest workers, and who were the leaders in the profession here. We have already referred to them, not in as extensive and eulogistic a manner as their merits deserve, but the same general principle has been continued of appointing good men—men respected in their professional work. They have given their time and attention to the charity wards freely, and in caring for their private patients, as the necessity presented. One point of interest is to notice the difference in the appointment of the staff of internes. I remember that in 1860-1861, the

hospital staff was made up of but one interne. I myself served for a time in that capacity. I remember reading over a report made by Dr. Thomas Hun, a few years previous, in which he stated that the greatest number of patients in the hospital at one time was twenty-five, that they were then being somewhat overcrowded, and that some provision ought to be made for the chronic tubercular and incurable cases. I also remember to have seen a report made by Dr. Armsby, as late as 1869, in which he stated that the maximum cost of conducting the hospital would not exceed \$10,000. Internes have gradually increased to two and four, and now we have six, all being kept continuously busy, notwithstanding the assistance they have from the members of the senior class in the medical college, who take notes, at times prepare patients, change dressings, etc. Note what an elaboration and increase in work!

About ten years after the close of the Civil war there developed throughout the country a tendency for the construction of smaller hospitals, and the contributions of liberal citizens made this possible. Many visits were made to the old building and inquiries made as to its good points, its management, etc., and it really had many excellent features.

In 1878, several changes were made, enabling us to begin and to continue that aseptic work in abdominal surgery which has made Albany somewhat of a surgical center for this line of practice. Much good was accomplished, and many failures presented, which could have been avoided had our technique been more perfect.

The Albany Hospital was among the first to bring trained nurses from Europe, yet has been exceedingly slow in the development of the training school for nurses. For many years we keenly felt the necessity of training our own nurses, and as you look about the city to-day you will find some of our ablest surgical nurses from the class that was trained in the old institution, but our great effort has been in the development of a new training school. Organized by such an able body of lady patronesses as we have, and conducted as it has been from the beginning by our present excellent superintendent, it has been a success. We have much to rejoice in. A hospital of this size must instruct its own nurses, and must have a school sufficiently large that patients may receive proper, adequate and intelligent service.

If necessity required a military hospital to be established in Albany to-day would we fear suppuration, gangrene, osteomyelitis and such conditions as presented in 1861-'62? I say most emphatically no, for we have now a progressive standard of treatment established that would soon eradicate any such conditions, even though the cases might present after long transportation.

One might spend much time in dwelling upon the evolution of hospitals from their early days up to their present status, but I have not the time, nor is this the occasion to take up that line of study. This much I venture to say: Hospitals in their construction should not be too elaborate, nor too expensive. The condition of comfort, for the modern treatment of the patient, and economy of administration should ever be uppermost in the minds of managers and should be secured by one and all.

Whatever may be the organization, whatever may be the ultimate aim of a plant of this size, we can consistently say that its objects are on the part of the medical staff:

1st. To do purely professional work, work that must be done by the physician and surgeon for the relief of suffering humanity. I have been identified with this institution in my professional work for nearly thirty years, and in that time it has ever been a comfort and incentive to me to note the earnestness with which the vast majority of the medical attendants have discharged their duties. A remark once made to me by an eminent clergyman of this city I think very pertinent. After observing an operation for removal of an abdominal tumor he said: "By your courtesy, and my desire to see a surgical operation, I have witnessed in this institution that which has impressed me very much, *i. e.*, that the most unfortunate, the worldly poor, the wealthy patient, so far as the skill of the surgeon is concerned, and the application of dressings and care, are placed on the same high plane of professional honesty." These remarks were impressive at the time, and were brought out by the careful observation of the visitor at the dressing of a wound.

In examining the yearly reports of the Albany Hospital, in its appeal to the public, it will be noted that our revenue is largely received from pay patients—that is, the vast majority of these patients pay from \$5 upwards for accommodations at the hospital—but only a small proportion of them are able to pay anything to the attending surgeon or physician for operations and treat-

ment, yet the professional skill given them is the same, and I think this establishes without question the first proposition.

2nd. Work that prevents the accumulation of old ideas or old stock on the shelves, and in the warehouses, work that is of the nature of experimental and scientific research must be our rule.

For many years our medical journals have frequently reiterated that medical colleges and hospitals have been sadly neglected and should have endowment funds with which to improve upon their methods of investigation, in the careful registration of cases, reports of operations and conclusions as to the results of methods of treatment, etc.

While this has been remedied to a certain extent in some of our larger institutions in this country, yet in the construction of such a plant as we now occupy, the Albany Hospital has much to rejoice over in what has been done by the generous citizens of Albany. The faculty of the Medical College, the medical staff of the Albany Hospital have worked for many years in a quiet way in pathological research, especially in the evolution of surgical technique, but at a great disadvantage.

A few years since, one of our public-spirited, broad-minded citizens, Mr. Matthew W. Bender, in conversation with Dr. Gorham, his family physician, and the writer, expressed a willingness to make a contribution for establishing a pathological laboratory, providing a proper site could be secured. We acknowledge with gratitude and appreciation Mr. Bender's gift. It has enabled us to pursue our methods of investigation with great exactness and benefit. Since its establishment many new conditions have presented and many new advances made in the study of cases. It is a great encouragement to observe the excellent work accomplished by Drs. Blumer, Lartigau and their assistants connected with the Bender Hygienic Laboratory.

It is a pleasure to state that there is in connection with the hospital a pathological laboratory, where the blood, urine and dressings are daily examined; the latter a matter of great importance in watching cat gut, silk and silk worm gut ligatures and sutures as to their sterility.

The examination and study of the blood in medical and surgical cases has developed a field of labor but yet partially explored, still constantly adding to our knowledge of disease, and producing beneficial results of great help to human suffering. The study of

infectious diseases, the secretions of the body, the tests made for early development of tuberculosis, of typhoid fever, of diseases of the lymphatic system has been greatly aided by the work done at the Bender Hygienic Laboratory. Urinary analysis has developed into a very advanced special study, and much time is given to the subject in connection with our hospital work. These are but a few points that come under the second classification, and yet are among the most important. It is true we know the histology of many tumors, but of their development something is being constantly learned in comparing one case with another. Of the ways and methods by which disease invades the human body, pathological investigation aids greatly, and in all this work I am proud to say that the Albany Hospital is endeavoring to do its full share.

Dr. Hailes and his assistants have done much to make practical use of the X-ray. This is, however, a subject requiring much time and careful technique.

Something has been said in reference to the relationship between hospitals and the medical profession. Surely! no two conditions exist where it is so necessary to commingle one interest with the other as in a well-equipped, modern hospital, thoroughly supplied with medical and surgical skill. One cannot well get on without the other. The public must have the confidence given them that the work in the up-to-date institution will be properly performed, if the plant is so constructed. The best men in the profession must be encouraged in knowing that their efforts are appreciated, and that while it is to them, perhaps, an incentive, as regards the experience they may acquire, still a large proportion of their work is of that character that the better it is done the better is it for themselves and for the institution. It is not very difficult to explain why ambitious and well-equipped men seek positions in well-regulated hospitals. They feel enthusiastic and are firm in the belief that they can reflect credit upon the institution and that the institution is to pay a proper respect for and a confidence in their professional ability. To keep up with the change in medicine to-day requires constant labor.

I believe such is the attitude of the governing body of this hospital, of the medical and surgical staff, and that each is to aid the other.

You have assembled here to-day to see something of the work of

this institution. The Board of Governors have opened the doors willingly, and have placed at the disposal of the medical and surgical staff all that pertains to this modern plant in the way of first-class operating rooms, and first-class appliances for the proper presentation of the technique of to-day. That the medical staff will discharge its duty honestly and faithfully, and for your encouragement, I have no doubt. The few weeks allotted to the course will serve to demonstrate this. I believe it is only in such a way as this, keeping in touch with medical centers, that the honest, hard-working, reputable practitioner of medicine can keep abreast of the progress that is being made in his profession. When once he has followed out this course, pursuing faithfully the opportunities that are given in this country for discovery, and profiting by new methods, there will be no instance of professional assignment, resulting from obsolete ideas, or worthless stock, with no resulting dividends.

A CASE OF ACCESSORY THYROID TUMOR AT THE BASE OF THE TONGUE.*

By CLEMENT F. THEISEN, M. D.,

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Accessory thyroid tumors at the base of the tongue are sufficiently rare to make the report of even a single case of some interest.

In January of this year, Mrs. C. G., sixty-seven years of age, was brought to my office by her physician, Dr. Sherman Van Ness, of Chatham Centre. She had been having trouble with her throat for a long time. As she expressed it, she felt as though she had a lump in the throat. Her physician had the tumor under observation for nearly a year, and stated that at times there seemed to be an acute hyperæmia of the growth, and it then seemed to be larger than when the mucous membrane was in a normal condition.

She had an attack of influenza about two weeks before consulting the writer, and was not in good general health, being pale and thin. On inspection of the throat a tumor considerably larger than a hen's egg was seen, which, when examined with the finger, was found to be situated at the base of the tongue, and appeared to extend fairly deeply into its substance. (See illustration. The diameter of the portion shown here is about two-thirds of the actual size.) The diameter of the tumor at its

*Read at the meeting of the Eastern Section of the American Laryngological, Rhinological and Otological Society, Buffalo, June 21 and 22, 1901.

widest portion was, as nearly as could be determined, about one and three-fourths inches. It was covered with a perfectly smooth mucous membrane, was not very hard, but rather more resilient to the sense of touch, and of a deep red color. Extending over its surface were several blood vessels, and the growth presented the appearance of considerable vascularity. It was not at all nodular, there was absolutely no involvement of the glands of the neck, the patient was not cachectic, so that its benign character could be at once determined. It was not attached to the epiglottis, for the finger could be readily passed between it and the tumor. Patient suffered no pain, and respiration was not much interfered with. As the case was identical in every respect with those described by Schadle and Warren, a diagnosis of a probable accessory thyroid tumor was made.

Considering the patient's age, general condition at this time, and the probability of severe hæmorrhage, I did not feel justified in subjecting her to an operation with the hot loop, or to the method of operating employed by Warren in his case, as the danger of hæmorrhage by either method was considered too great, and if it occurred, could not be readily controlled.

Drs. George Blumer and A. MacFarlane, of Albany, saw the case in consultation with me, and agreed both as to the nature of the tumor and the inadvisability of an operation.

Patient was given thyroid tablets, simply as an experiment, a five-grain tablet with one-sixtieth of a grain of strychnia being administered after each meal and continued for six weeks. This was followed by no bad effects, no nervous symptoms developing. The tumor was again carefully measured and appeared to be somewhat smaller, although it is quite possible that the first measurements were not entirely accurate. The administration of iodide of potash was also advised.

A very interesting case of accessory thyroid tumor in this region has been reported by Schadle. (*Transactions of the Section on Laryngology and Otology, A. M. A., 1899*). His case occurred in a young married woman, 25 years of age. The growth was about the size of an English walnut and was of a deep purplish-red color. The tumor was removed by Dr. Mc Burney, and on microscopical examination was found to be a gland of the thyroid type. A second case in which the tumor was slightly larger than a hen's egg, and situated at the base of the tongue was also seen by Schadle. The diagnosis in this case was not verified by histological examination, but it too was undoubtedly a case of accessory thyroid.

Another case in which the diagnosis could be positively made has been reported by J. Collins Warren (*American Journal of the Medical Sciences, Vol. CIV., P. 377, 1892*). His patient, a married woman, fifty-two years of

To Illustrate Dr. Theisen's Article on "A Case of Accessory Thyroid Tumor
at the Base of the Tongue."

Albany Medical Annals, October, 1901.



age, had noticed a lump in the throat for twenty-two years. On examination a tumor about the size of a hen's egg was seen situated at the base of the tongue. Under ether the tongue was brought forward by ligatures, passed through the tip and dorsum, and after an incision had been made along the median line, the tumor could be enucleated from its position. Patient was seen about three months after the operation and there was at that time no indication of a recurrence. The microscopical structure of the growth was found to be that of a ductless gland, with colloid degeneration, and in all essential histological details it corresponded to the thyroid.

H. C. Butlin, (*Transactions of the Clinical Society*, Vol. XXIII., P. 118, 1890), has collected eight cases including two of his own. They all occurred in females. Operations were performed in both of Butlin's cases. In the first, a woman 32 years of age, the tumor was removed through the mouth by an incision in the median line, a preliminary tracheotomy being performed. There was a recurrence, but of much smaller size. The second case also occurred in a female aged twenty-three. The growth had existed two years and was removed with the galvano-cautery loop.

In this connection it may be of interest to allude also to the accessory thyroid glands occurring in the larynx and trachea. In this region they are far more common. V. Ziemssen (*Die Krankheiten der oberen Luftwege*, Moritz Schmidt, P. 617, 1897), reported the first case of accessory thyroid occurring in the larynx. Cases have also been reported by Paltauf, Heise, Bruns, Roth and Schrötter. In this locality accessory thyroid glands occur mainly in the form of bright red, sub-glottic tumors, about the size of a bean. As a rule the diagnosis can only be positively cleared up with the microscope. Scheuer has collected five cases occurring in the trachea. They were all situated on the posterior wall. Mention might also be made of a case reported by Bell, (*Montreal Medical Journal*, Vol. XVII., P. 842, 1888-'9). A tumor the size of a hen's egg was situated directly upon the crico-thyroid space and first two rings of the trachea. Microscopically it was found to consist of thyroid gland tissue degenerated in the centre. Intratho-

racic goitres are of fairly rare occurrence, still Wuhrmann has found in the literature ninety-one cases altogether. They are supposed in part to take their origin from other accessory glands, particularly from the inferior accessory thyroid gland of Gruber.

In considering the origin of accessory thyroid tumors at the base of the tongue, I cannot do better than to give the views of His and Sutton. Sutton (quoted by Schadle), states "that they originate in connection with the lingual duct, a structure of embryonic significance. In the embryo a diverticulum takes place from the anterior wall of the pharynx, forming what is known as the thyreoglossal duct and about this the thyroid gland is developed. This duct opens at the base of the tongue at a spot represented in the adult by the foramen cæcum, and passing downwards, bifurcates to form the isthmus of the thyroid. As development goes on the hyoid bone is formed, and in its growth divides the duct into an upper (lingual), and a lower (thyroid) portion. Both of these are as a rule obliterated when development is complete. Occasionally, however, either of the two portions persists, closed at both ends, and give rise to a cyst. It is in connection with this lingual portion of the thyreoglossal duct, that such a tumor is developed."

According to His, the middle lobe of the thyroid is developed in a track which is directly continuous with the foramen cæcum of the base of the tongue. Tumors occurring about the foramen cæcum were formerly considered by some writers to be simply adenomata.

It is interesting to note that all the cases of accessory thyroid tumors at the base of the tongue mentioned above occurred in women.

In conclusion the very large size of the tumor in the writer's case is worthy of note. Another interesting point is the fact that when the patient was a young woman she had a well marked goitre. At the present time the thyroid cannot be felt at all. The fact too that at times the tumor is larger than at other times is of importance from a diagnostic standpoint as that is quite characteristic of such glandular structures.

For the ANNALS.

ADRENALIN CHLORIDE.

By BURTON S BOOTH, M.D.,

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The stimulus which laryngology and rhinology have recently received through Dr. W. H. Bates' addition of the aqueous solution of the suprarenal gland to our armamentarium is second only to the impulse given that department of medicine when Dr. Karl Koller demonstrated the value of cocain as a local anæsthetic. The acquisition of the solutions has furnished us with a most valuable and perfect hæmostatic, astringent and heart stimulant. One great objection to their use was their susceptibility to rapid decomposition. Various methods were advocated for their preservation, but until Dr. Jokichi Takamine succeeded in isolating the active principle of the suprarenal gland, we could not rely with any degree of certainty upon the stability of its preparations. The adrenalin chloride is a drug which has not only the advantage of stability but can be sterilized as often as necessary without deleterious effect. We are therefore indebted to Dr. Jokichi Takamine not only for giving us this admirable preparation but also for being the first to successfully abstract from a gland a crystalline active principle, thereby bringing us to the threshold of an entirely new line of drugs enabling us to supply the body with that which nature intended, but which disease has deprived it of. The aqueous solutions served us well, thanks to the addition of preservatives and careful preparation; but now they must give place to a more reliable and scientific drug. The best way of applying the adrenalin chloride solution for operative purposes is by means of cotton and applicator. The field of operation should be at first thoroughly cleansed, the strength of the adrenalin solution should be from 1-3000 to 1-5000 and should be applied to the membrane before the cocain. This method prevents too much cocain gaining entrance into the system thereby reducing the toxic effect of the latter. When adrenalin chloride is to be used for shrinking the engorged or redundant membrane of the nose to allow a thorough inspection, a 1-5000 solution is strong enough. When placed in the hands of a patient to be used in an atomizer (a procedure not advocated

because of the rapid oxidation of the drug when so used) a 1-10000 solution is the proper strength. Great care must be exercised to be sure that the solution is sterile and that the applicators which are to be dipped into the solution are likewise clean and sterile, so as not to infect or change its character. The question of secondary hemorrhage following the use of the adrenalin solution and of the aqueous solution of the gland has been referred to many times. I certainly have seen a brisk, but not dangerous hemorrhage, follow the use of the aqueous solution of the suprarenal gland. But in every case cocain had been used in conjunction with the suprarenal solution, and consequently I am unable to place the responsibility; but I am inclined to believe that both contributed to the result. I have not observed any trouble in this direction since using the adrenalin chloride solution; this I attribute to the method employed, i. e., the hemorrhage will be nil if the parts are packed with an astringent, or if the patient be given a weak solution (1-10000) to drop or spray the parts to keep up the effect until the vessels have closed (36 to 48 hours are necessary). Taken internally the adrenalin solution has had no effect in controlling traumatic hemorrhage, i. e., epistaxis, etc.; but I am sure it will be found to be of value in relieving the hemorrhage resulting from scurvy, as bleeding from the gums, throat, rectum, and under the skin. There has been much said in relation to its value in treating inflammatory diseases of the upper air passages, as acute and sub-acute coryza, hay fever, pharyngitis, laryngitis, etc., so I will not recapitulate. I desire, however, to relate that I have found that a spray of (1-10000) the adrenalin solution used with down-shoot Sass tube into the larynx allays the hoarseness and tones up the vocal chords so as to allow a singer to use the voice to the best advantage in a short time. I have used the adrenalin with chloretone to anaesthetize and to contract the nasal mucosa before using the Eustachian catheter. It not only facilitates the passage of the catheter but so reduces the swelling about the fossa Rosenmüller as to allow inflation and medication of the tube and middle ear with ease. I have also used it for the same purpose in electrolysis of the Eustachian tube, and find it works admirably. The effect of this drug on the

Eustachian tube is temporary and not lasting except in acute and sub-acute inflammation with obstruction. In these cases the patency is restored, the middle ear is ventilated, and the symptoms dependent upon retraction of the drum are relieved. I have had no experience with the drug used subcutaneously but have been told that it is useful in superficial plastic work about the face. I have seen adrenalin chloride work very well in one case of hydrorrhœa when used (1-10000) by means of a spray several times a day. For its stimulating effect on the heart I have had no experience except in weakness, and the condition resulting there from, during or following the administration of chloroform or ether. Here a few drops of a 1-1000 solution of the adrenalin chloride placed under the tongue of the patient will quickly restore the blood pressure to its normal condition. Whether or not it has the same or better effect when used hypodermically, I am unable to say as I have not yet tried it. It is a valuable heart stimulant to be carried by the anaesthetist for emergency. I have never seen any toxic constitutional effects from this drug and we are told that there is no danger in that respect. It has been observed that some patients have an intolerance to this drug when applied to the nasal mucosa. These people complain of violent sneezing, pain in the eyes, and over the regions of the anterior ethmoidal and frontal sinuses, running of the nose, injection of the conjunctiva, and headache. These symptoms may last several hours and cause intense pain and suffering. The cause of this intolerance is hard to explain; it may be that the solution used was infected, or that the applicator was not clean, or that the solution used was too strong. Occasionally it will be observed that a slough will follow an operation where the adrenalin chloride has been used. This is probably explained by the prolonged contraction of the vessels, with resulting necrosis of tissue, due to diminished blood supply. If this theory is correct, the use of weaker solutions, will obviate this accident.

The adrenalin chloride solution is incompatible with any of the oily vehicles, but Dr. Takamine is said to be experimenting with an oleate of adrenalin, and if he succeeds, we will be able to combine it with the various petroleum preparations for use in the atomizer, although the rapid oxidation of the adrenalin solution renders it an objectionable way of using it.

THE RELATION OF BACTERIOLOGY TO MEDICINE.

By J. A. WILDER, M. D.,

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The discovery of the relation of bacteria to disease has produced such a remarkable change in the practice of medicine in all of its several departments and has so broadened our conceptions of disease and disease processes that it seems difficult to overestimate its value in this connection. Going hand in hand with pathology, as it does, it is continually opening new fields for research to the scientist, and in many instances it guides the clinician in the study and practice of his profession. That so many men do not realize that bacteriology is still in its infancy, and that our knowledge of a great many of its subjects is still incomplete, are, I think, the chief reasons why they have been disappointed with the results obtained in the laboratory. As a history of the origin and development of this science may be obtained in any text-book on bacteriology, I have thought it best not to dwell on that subject in this paper.

Although the results of the discovery of the relation of bacteria to disease are not at first glance as striking in internal medicine as in surgery, still on careful reflection it seems to me that they are in many instances fully as important. First, let us consider its relation to that most important branch—preventive medicine. Its influence in limiting the spread of disease can be seen here in various ways:

- (1st) in the direct destruction of pathogenic bacteria;
- (2d) in rendering the soil outside of the body less suitable for their development;
- (3d) in causing the tissues of the body to be less suitable for their development;
- (4th) in the recognition of disease in the lower animals that may be transmitted to man and taking precautions to prevent such transmission.

Under the first heading we may note

- (a) The proper disinfection of excreta when these sub-

stances are a means of dissemination of disease. As examples of this may be mentioned the destruction of sputa from individuals whose lungs have become involved in tuberculous infections, bubonic plague infections, or in pneumococcal infections; the disinfection of the urine and stools from patients suffering from typhoid, cholera or tuberculous infections.

(b) The disinfection, by means of various antiseptic solutions, formaldehyde gas and abundance of sunshine, of buildings that have harbored persons suffering from infectious diseases; also the disinfection of clothing and bed-linen of such persons by means of heat and the above mentioned agents. Although the latter was carried out to a considerable extent long before the recognition of the pathogenic bacteria, it was undoubtedly founded on the suspicion that disease was disseminated by some of the means that have in recent years been proved to exist. The perfecting of this line of work, as in most other departments of sanitary science, is dependent on the recognition of bacteria as causal agents of disease.

(c) The boiling of water and Pasteurization of milk, when these substances are not above suspicion, and the proper cooking of food. The effect of these precautions is to restrict the spreading of those diseases, as typhoid, cholera, cholera infantum and epidemic tropical dysentery, in which the bacteria live and multiply in our water and food supplies, and to the attacks of which the alimentary canal is especially susceptible.

Under the second heading, i. e., rendering the soil outside of the body less suitable for the development of the pathogenic bacteria, we may consider the wonderful advance in the hygiene of our municipalities, the scrupulous care and periodical bacteriological examination of our water supplies, and more recently the process of slow sand filtration that has been adopted with success by some of our cities. The admirable improvement in sewerage systems throughout the civilized world, also in the sanitary condition of our buildings and the amelioration of the garbage nuisance by means of cremation, are very important points in this division.

Under the third heading, i. e., causing the tissues of the

body to be less suitable for the growth of bacteria, may be considered the immunization against disease produced by the injection into the body of antitoxic sera. In diphtheria antitoxin we have a product derived indirectly from bacterial growth that in most cases will produce a positive immunity against diphtheria for a short length of time. In cholera antitoxin and bubonic plague antitoxin we have also remedies that increase the resisting power of the individual against these diseases, either by neutralizing the toxins of the bacteria or by attacking the bacteria directly. The knowledge that many of the pathogenic bacteria will not produce disease in tissues that are in an absolutely healthy condition is a warning as well as an encouragement to people to do everything possible to keep their bodies in the best physical condition.

Under the subdivision entitled "the recognition of disease in the lower animals that may be transmitted to man and taking precautions to prevent such transmission," may be considered the use of tuberculin in cattle suspected of tuberculosis and the use of mallein in horses suspected of glanders. Who can say how many cases of intestinal tuberculosis in human beings have been prevented by the use of the tuberculin test? When we consider the fact that virulent bovine tubercle bacilli have been repeatedly demonstrated in the milk of tuberculous cows, particularly those having tuberculous udders, and that the tubercle bacillus frequently passes through the stomach without having been in contact with the gastric juice long enough for its destruction, I think we have good grounds on which to make the assertion that the application of this test and consequent killing of diseased cattle save many persons annually from tuberculous infection. Although glanders is rather infrequent in man, still when it does attack human beings it is an exceedingly fatal disease. In mallein we have an agent for its detection and therefore a means to prevent its transmission.

The enforcement of laws bearing on these subjects by the boards of health in all highly civilized communities has undoubtedly been dependent to a great extent on the recognition of the relation of bacteria to disease. Therefore to this also should be given the credit for the decline during the last few decades of many of the infectious diseases, both

those for which specific bacteria have been found, as typhoid fever, tuberculosis, cholera and bubonic plague, and some of those scourges the micro-organisms of which have not been positively isolated, as typhus fever, yellow fever, scarlet fever, hydrophobia and smallpox. In countries or localities where strict precautions tending to the destruction of the pathogenic bacteria are taken the death rate from these diseases is probably lower than ever before. In contrast we must consider the ravages of these diseases where such precautions are not taken. That the decline in these diseases can be traced, in the majority of instances, to the recognition of bacteria as causal agents of disease cannot, it seems to me, be disputed.

In passing on now from the influence of the discovery of the relation of bacteria to disease on prophylactic medicine, its influence on the etiology of disease seems to be next in order. At the present time we are able to say with a great degree of certainty that we know the specific bacteria that cause at least sixteen of the infectious diseases. These are tuberculosis, diphtheria, anthrax, typhoid fever, erysipelas, septicemia, pyemia, tetanus, Asiatic cholera, relapsing fever, bubonic plague, gonorrhoea, influenza, actinomycosis, glanders and lobar pneumonia. This knowledge, coupled with continued experimental work, has given us good reason to believe that we know also the bacteria producing certain other infectious diseases, viz., syphilis, leprosy, yellow fever, epidemic cerebro-spinal meningitis and epidemic tropical dysentery, and also to cause us to feel that in the course of time, with improvement in microscopical instruments and methods and improved bacteriological technique, we will be able to isolate and study the organisms causing the remainder of the infectious diseases.

In diagnosis the subject of this essay now plays a most important part in clearing up the nature of obscure diseases. Under this division some of the most important points to be considered are:

1. The examination of sputum for the tubercle bacillus, influenza bacillus, bacillus of bubonic plague, diplococcus pneumoniae.
2. The examination of cultures from the throat for the bacillus diphtheriae, streptococci and staphylococci.

3. The examination of fæces for the typhoid bacillus, tubercle bacillus, cholera spirillum, the bacillus of epidemic tropical dysentery (Shiga).

4. The examination of urine for the tubercle bacillus and the typhoid bacillus.

5. The examination of urethral and vaginal discharges for the gonococcus.

6. The examination of exudates from joint cavities for the tubercle bacillus, gonococcus, streptococci and staphylococci.

7. The examination of exudates from the serous cavities also of subcutaneous exudates for the tubercle bacillus, the bacillus of anthrax and the pyogenic cocci, also the inoculation of animals with these exudates.

8. Bacteriological examinations of the blood.

9. Bacteriological examinations of the cerebro-spinal fluid.

10. The agglutination test for typhoid fever and relapsing fever.

The last test is the most recent application of bacteriology to diagnosis that has attracted attention of members of the profession to any great extent. Although practical use of the phenomenon was first made only as far back as 1896 we have such an abundance of statistical evidence of its value that it has already superseded other bacteriological methods used for assistance in the diagnosis of typhoid. In a series of 5978 cases, running clinical courses, of typhoid reported by 101 different observers and collected by Cabot,¹ 5814, or 97·2-10 per cent. are said to have given a positive reaction. In 5668 control cases, consisting of patients suffering from a large variety of diseases other than typhoid, 5345, or 95 per cent., were negative. In a series of 2283 typhoid cases collected by Kneass and Stengel² the reaction was obtained in 95·5-10 per cent.; and in 1365 non-typhoid cases 98·4-10 per cent. were negative.

My personal experience with the test is limited to 62 cases in which the patients had clinical symptoms of typhoid, and to 82 control cases. In the 62 typhoid cases 58, or about 94 per cent., gave a positive reaction at some time during the course of the disease, the majority by the end of

the first week of confinement to bed. My control cases have so far without exception proved to be negative.

The application of the test in relapsing fever³ has not been as extensive as in typhoid, but its value in diagnosis appears to be great in countries where relapsing fever is common. Various observers have claimed good results from the employment of the test in other diseases, conspicuous among these being yellow fever⁴ and cholera⁵, besides a number of diseases produced by non-motile bacteria, but their results have not yet been extensively confirmed. It seems to me that we may before long be able to apply this test to the majority, if not all, diseases caused by motile bacteria.

In tuberculin (Koch's Original) we have an agent whose value has been very much underestimated and which when a reliable preparation is used and properly handled gives great assistance in the diagnosis of incipient phthisis before tubercle bacilli can be found in the sputum. Its use in this connection has greatly increased in this country during the past few years. The great value of this test for the detection of tuberculosis in cattle has already been considered under the heading of preventive medicine.

The value of the other methods mentioned for the application of bacteriology to diagnosis has been so abundantly proven that I will not enter into its discussion here.

The influence of the discovery of the relation of bacteria to disease in prognosis is felt chiefly by its relations with etiology and diagnosis. As examples of its importance in this branch of medicine may be mentioned those cases of endocarditis in which the gonococcus or streptococcus can be demonstrated in the blood. In such cases we expect the disease to be more severe than it would be if they were absent.

In a case giving clinical symptoms of bronchitis but in which we find the tubercle bacillus in the sputa, we know that we are dealing not with a simple bronchitis but with a tuberculous infection and our prognosis is more guarded than it would be otherwise.

In those cases of empyema in which the diplococcus lanceolatus only is present in the pus, the prognosis is more favorable than when the streptococcus or staphylococcus is present.

Negative results are often quite as important in prognosis as positive results, simple diseases simulating grave infections being often exposed by means of our knowledge of bacteriology.

The influence of the subject of this paper on the treatment of disease can be seen directly in some instances, indirectly in many ways. In diphtheria antitoxin we have an agent which even to the most conservative physician who has watched its effects in individual cases and noted the great reduction in mortality in epidemics of diphtheria since it has come into general use, shows a remarkable advance in scientific medicine. In tetanus antitoxin we have another bacterial product which although not as certain in its effects in tetanus as diphtheria antitoxin is in diphtheria, still when used in early stages of the disease, before marked poisoning to the nerve centers has taken place, has been of decided benefit in quite a number of cases. In antispirillum serum we have a valuable remedy for relapsing fever, and in anti-plague, anti-cholera, anti-streptococcus and anti-pneumococcus sera remedies that seem to have some value, and which, if perfected, will undoubtedly be of great benefit. In the light of recent theories advanced for the action of toxins and antitoxins on animal cells, notably the *Seitenketten Theorie* elaborated by Ehrlich, it seems to me reasonable to believe that with further advance in the study of bacteriology and its relations to medicine we may eventually have antitoxic sera that will counteract the toxæmias of all the acute infectious diseases, or will at least confer immunity to them.

After serious organic changes have taken place in the body we cannot of course expect such treatment to overcome entirely the ravages of such infections. The treatment of chronic diseases by bacterial products has been attended with much less success than the acute infections. But even here we are not without some hope of future success. That Koch's original tuberculin and a few of its modifications, notably that of Hunter, have, when properly used, produced beneficial effects in some cases of pure tuberculosis, has, I think, been satisfactorily demonstrated. That more harm than good has been done by them, due to the fact that the clinician has not understood their limitations, I think equally true. Although

the new (T. R.) tuberculin has been reported on favorably by quite a number of foreign observers, it has been a disappointment to most of the men who have used it in this country. Koch's dogmatic statement⁶ to the effect that we can hope for nothing superior to this agent from bacterial products in the treatment of tuberculosis should not, it seems to me, discourage those engaged in that line of work, even when coming from such an authority. The various anti-tubercle sera have so far, it seems to me, produced two widely different results: first, an incentive for further study and labor by the intelligent and conscientious laboratory worker; second, a means of financial gain to the pseudo-scientist and charlatan. That slightly beneficial results have been obtained by this method of treatment in a limited number of cases by men whom we are certain belong to the former class is certainly encouraging; although, on the other hand, the results appear meagre when compared with the enormous amount of work done on the subject. That men belonging to the latter class should dupe their patients and endeavor to cover their trickery by the cloak of science are, it seems to me, some of the most deplorable results of the subject of this paper.

The influence on the treatment of disease indirectly can be observed in almost innumerable ways, largely by the connection with the other departments of medicine. With a knowledge of the etiology of disease we have a clearer conception of the disease and can take up its treatment in a rational manner and in this way avoid to a great extent the loss of valuable time and the indiscriminate dosing that was formerly so prevalent. The recent treatment of sepsis by diluting and assisting the elimination of the toxins by transfusion of saline solution is an example of the application of this knowledge. Its effect is very noticeable in the treatment of pulmonary tuberculosis in which the future welfare and in many instances the life of the patient depend on the early recognition of the disease; the outdoor life, nourishment and rest often producing complete arrest of the disease in incipient cases and allowing the patients to resume their previous occupations; while if the disease be not recognized until advanced lesions have formed we cannot hope for much more than prolongation of life under conditions that are far from satisfactory.

In no branch of medicine has the application of this subject gained more brilliant results than in obstetrics. Since the thorough and systematic use of asepsis and antisepsis in this department the dreaded puerperal fever is almost a thing of the past, the so-called epidemics of this disease having long since disappeared. Before this the mortality from this infection in some of the most prominent maternity hospitals of the world, including those of Paris⁷ and Vienna,⁸ was from 4 to 11 per cent.

Since the introduction of asepsis and antisepsis the mortality rate has fallen to from 2-10 to 4-10 per cent. In the New York Maternity Hospital during the nine years preceding the introduction of these subjects there were 3504 deliveries with a mortality of 146, or more than 4 per cent. During the nine years in the same hospital following the enforcement of the systematic application of asepsis and antisepsis in 1893 there have been 3709 women confined with a total mortality of 33, or 87-100 per cent. Of these 33 only 7, or 18-100 per cent. of the total number confined, died of sepsis.

In pediatrics the evolution of infant feeding is especially worthy of note. The Pasteurization of milk and other foods has to a remarkable degree prevented the summer diarrhœas and attacks of cholera infantum that are so often of bacterial origin. Its effect in the prevention of intestinal tuberculosis has already been discussed. -

Thus we see that the discovery of the relation of bacteria to disease has caused the dawn of a new era in the practice of medicine. In prophylactic medicine especially, which was formerly in a most unsatisfactory and incomplete condition, it has introduced law and order and enabled us to combat invasions of epidemic diseases intelligently. In the other departments of medicine its influence is hardly less important. Instead of groping in the dark, as was done to a great extent in former years, we can now take up the practice of medicine realizing that the light of bacteriology has materially assisted in enabling us to use rational treatment for disease, and has, more than any other one subject, given the practice of medicine a substantial scientific foundation. Let us hope that with this foundation already laid we may be able to see

as much improvement in this subject at the close of the next two decades as has been made in the two just past.

BIBLIOGRAPHY.

1. CABOT. *Serum Diagnosis of Disease*, 1889, p. 63,
2. GOULD. *Year Book*, 1898.
3. LÖWENTHAL. *Deutsche medicinische Wochenschrift*, 1897, No. 35, Moscow Congress, August 23, 1897.
4. SANARELLI. *Annales de l'Institut Pasteur*, October 27, 1897.
ARCHINARD. *Philadelphia Medical Journal*, Vol. 1, No. 6.
LERCH. *Journal of the American Medical Association*, February 26, 1898.
5. ACHARD AND BENSUADE. *Press Médicale*, September 26, 1896.
6. KOCH. *Deutsche medicinische Wochenschrift*, April 1, 1897.
7. BILLET. *De la Fièvre puerpérale et de la Réforme des Maternités*, 1872, p. 59.
Gazette des Hôpitaux, 1866, p. 151.
8. SEMMELWEISS. *Die Etiologie, der Begriff und die Prophylaxis des Kindbettfiebers*, 1861, p. 3.
9. GARRIGUES. *American Text-book of Obstetrics*, 1895, p. 709.

Clinical and Pathological Notes

A Record of 294 Vaccinations of Children at the Albany Orphan Asylum. By J. M. MOSHER, M. D.

During the prevalence of small-pox in Albany in the spring of 1901, the children of the Albany Orphan Asylum, ranging in age from two to fifteen years, were vaccinated. These children do not mingle generally with the community, but are subject to visitation by friends whose surroundings and habits are often unknown. The vaccinations were made in April and May, at a time when an epidemic of mild small-pox had gained a foothold in the Lathrop Memorial Home, a branch of the asylum. The two institutions are in different parts of the city. There is some inter-communication, and the laundry is done in common. No small-pox occurred in the Orphan Asylum. The conditions were complicated by the presence of diphtheria in the asylum, which required several weeks of rigid quarantine and the constant use of antitoxin. The children were vaccinated, irrespective of the diphtheria. There were no deaths from the latter disease, and there was no apparent modification, favorable or unfavorable, either of the vaccinia or of the diphtheria.

The operations were done under strictly antiseptic precautions. The arms were thoroughly cleansed with soap and water and a moist bichloride pack was applied. As the children approached the operator the pack was removed and the site was again cleansed

with alcohol, which was allowed to evaporate. Ivory points, moistened with the virus, and severally protected by gelatin tips were supplied by the Albany Board of Health, and scarification was made with the points, a fresh one for each subject. The points were occasionally dry, rendering revaccination necessary. After drying, the wound was protected by dry sterile gauze. It was not possible to prevent interference in all cases among so many children, but very few complicating infections resulted, and none of these were severe. There was no case with pronounced elevation of temperature, and in only one instance a skin eruption ensued, a transient scarlatiniform rash of the head, neck, chest and arms manifesting itself for a few hours.

Of the 294 vaccinations, 206 were primary. Of these 173 were successful. The average time required for the development of the typical pustule was nine days; the shortest period of development of the pustule was five days, of the scab, seven days; and the longest period for the pustule was fourteen days, and for the scab, twenty-four days. The scab generally dropped off ten days later.

Thirty-three primary vaccinations were unsuccessful; that is, at periods ranging from five to ten days there were no indications of irritation. Of these children, one was re-vaccinated on the eighth day, two were re-vaccinated on the ninth day, five on the tenth day, nineteen on the eleventh day and six on the twelfth day. All the re-vaccinations were successful.

Eighty-eight children had been previously vaccinated. Four, vaccinated within a year, resulted negatively. In three cases, vaccinated two years before, one resulted negatively, one passed through the stages of irritation, vesicle, pustule and scab, but the process was not entirely typical, particularly in respect to umbilication, and the pustule was not present until the twelfth day and the scab formed on the nineteenth day. The remaining case presented no pustule, and the atypical scab formed on the ninth day. Three children had been vaccinated three years previously. One of these resulted positively, one negatively and one ran an atypical course. Of three cases vaccinated four years before, two gave negative results and one ran an atypical, but probably positive, course, the pustular stage omitted. Of four cases whose previous vaccination dated six years back, two were negative, one was positive and one was atypical. Five children had been vaccinated

seven years before, and the results were indeterminate; they passed through the stages of vesicle and pustule, but the characteristic umbilication was wanting and the scab was atypical. One child vaccinated eight years before also presented an indefinite result; and of two children, whose first vaccination dated back nine years, one resulted negatively, and one was atypical. Nine children had been previously vaccinated, ten years or more before, without a definite positive result. Seven of these were certainly negative, but in one case a re-vaccination, after ten days, resulted in an umbilicated pustule. The remaining two ran an atypical course, which may have indicated a positive result of modified form.

Twelve children had had two previous vaccinations; of these eleven resulted negatively and one passed through the stages of irritation, vesicle and pustule in nine days.

Of seven who had had three previous vaccinations, only one ran a typical course, three were atypical, presenting one or more stages of the definite lesion, and three were unquestionably negative.

The thirty-five remaining children gave evidence of previous vaccination, but no particulars were ascertainable. The results in these cases were negative in twelve instances. Seven ran a fairly definite and characteristic course and the other sixteen presented the atypical and irregular lesions already described.

To summarize:

Of these eighty-eight cases in children presenting scars of previous vaccinations, twelve were thus definitely successful, thirty-two ran an atypical course, and forty-four were definitely negative. In the cases of one previous vaccination, three were positive, thirteen were atypical and eighteen were negative.

Of those who had been previously vaccinated more than once, nine were positive, nineteen were atypical and twenty-six were negative.

The results in the cases of previous vaccination may be tabulated as follows:

	RESULTS			
	Positive	Atypical (Modified)	Negative	Percentage Successful
One previous vaccination.....	3	13	18	47
More than one previous vaccination..	7	19	26	52
TOTALS.....	12	32	44	50

From this series of vaccinations two important conclusions may be drawn. In the first place there is probably no natural immunity against vaccination, and unsuccessful primary vaccinations must be ascribed to inactive virus or faulty technique. Secondly, one-half of all persons who have been previously vaccinated, are susceptible to re-vaccination, which may run a completely characteristic or a modified course.

Editorial

"It is very evident that neither highway robbery nor highwaymen thrived in America. They mended their ways very promptly—and apparently they wanted to. A very striking example of this is in the American Career of Captain Thunderbolt, the friend and teacher of Mike Martin. When he set foot on American soil, he tamely abandoned all his old picturesque wicked ways. He settled first in Dummerston, Vermont, where he taught school and passed his leisure hours in seclusion and study. He then set up as a physican in Newfane, Vermont, calling himself Dr. Wilson, and he moved from thence to Brattleboro, where his house stood on the present site of the railroad station. He married the daughter of a prominent Brattleboro farmer, but was too stern and reserved to prove a good American husband. He lived to be about sixty-five years old, and had a good and lucrative professional practice."

ALICE MORSE EARLE.

Stage Coach and Tavern Days.
P. 407.

Since the publication of Koch's recent article, which he read before the British Tuberculosis Congress, criticism has been rife in the medical journals, and many strange and unwarrantable statements have been issued by the lay press, particularly by the representatives of icteric journalism. It seems to us that this is another instance of "All cry and no wool," or at least very little wool.

As a matter of fact Koch advanced no view, clearly supported by experiment, which had not been advanced before. Inoculation of cattle with human tubercle bacilli, had been previously made with similar results, and Theobald Smith and other prominent bacteriologists have contended for years that human and bovine tubercle bacilli were different varieties of the same species. Koch's statement that the susceptibility

of human beings to bovine tubercle bacilli is very slight was not a very remarkable one considering the published facts regarding the matter, though his deduction therefrom that the customary measures against bovine tuberculosis should be dropped is entirely unwarranted.

His one great mistake we believe was in taking for granted that the introduction of tubercle bacilli by the alimentary canal would, if it produced tuberculosis at all, cause intestinal tuberculosis. There is plenty of evidence to show that bacteria can pass through the intestinal walls without changing them and lodge elsewhere, and there is some evidence to show that this may occur at times with the tubercle bacillus.

Whilst primary intestinal tuberculosis is very rare, tuberculosis of the mesenteric glands is relatively common, especially in young children, and so is peritoneal tuberculosis. If Koch's article does nothing else, it will have fulfilled a valuable function if it leads to a thorough investigation of the problems connected with the entrance of tubercle bacilli into the body by the alimentary canal, for no matter how much we disapprove of Koch's stand, we must admit from a candid review of the field that our assumptions regarding alimentary tuberculosis have been based on too small a collection of evidence.

In Memoriam

NATHANIEL S. CHEESEMAN, M. D.

Dr. N. S. Cheeseman died at his residence in Scotia Thursday, September 12, 1901. His health had not been very good for over a year and his death was not unexpected.

Dr. Cheeseman was born in Amsterdam, N. Y., in 1834, and was consequently sixty-seven years of age. He attended school in Amsterdam during his boyhood and, while still very young, taught a district school for two years. In 1851 he entered Union College, from which he graduated in 1856 with high honors. In 1858 he entered the Albany Medical College, graduating in 1860. He remained three years in the Albany Hospital, and then com-

menced practice in Glenville. In 1868 he removed to Scotia, where he practiced his profession until his death.

Dr. Cheeseman was always warmly interested in politics and was elected coroner in 1874 on the Republican ticket. For many years he was health officer of the town of Glenville, resigning his position a year ago on account of ill-health. He joined the Methodist church when twelve years of age and was always an active member, besides being an effective speaker on the temperance question. He was a member of the Medical Society of the County of Schenectady, the Medical Society of the State of New York and the American Academy of Medicine.

Public Health

Edited by Joseph D. Craig, M. D.

DEPARTMENT OF HEALTH—CITY OF ALBANY, N. Y.

ABSTRACT OF VITAL STATISTICS, AUGUST, 1901.

Deaths			
Consumption.....	18	Albany City Hospital.....	14
Typhoid fever.....	3	St. Peter's Hospital.....	4
Diphtheria.....	2	Homœopathic Hospital.....	1
Cholera infantum.....	14	County House.....	6
Pneumonia.....	2	Penitentiary... ..	2
Broncho-pneumonia.....	2	St. Margaret's Home.....	5
Apoplexy.....	6	Little Sisters of the Poor ...	1
Bright's disease.....	14	S. Francis de Sales.....	1
Cancer.....	6	House of the Good Shepherd	1
Accidents and violence.....	7	Albany Orphan Asylum.....	1
70 years and over.....	18	Total deaths.....	134
1 year or under	26	Death rate August, 1901.....	12.96
Births.....	82	Marriages.....	34

THE DIAGNOSIS OF DIPHTHERIA

The differences between clinical and bacteriological diphtheria are touched upon in a memorandum in the annual report of the Board of Health of the City of Lynn, Mass. It is stated that 69 cultures for diagnosis were examined for diphtheria bacilli, of which 29 were negative, 37 positive and 3 showed no growth.

Of the positive cultures, the clinical diagnosis of diphtheria was made in 21 cases, three cases were reported clinically as being not diphtheria, and in 13 cases the diagnosis was not recorded.

Of the negative cultures, diphtheria was stated to be the clinical diagnosis in 8 cases, 5 cases were reported as not being diphtheria, and the diagnosis was not recorded in 16 cases.

Thus, out of 69 cultures erroneous diagnoses were made in 10 cases.

MILD SMALL POX

The success with which the spread of any infectious disease can be controlled is directly proportionate to the ease with which it can be recognized. As a result of the beneficent influence of vaccination, small pox has become so rare that many medical graduates have never seen a case, and their failure to recognize the disease when it comes under their notice is, therefore, in some degrees pardonable. This deficiency should, however, be made good, so far as possible, by demonstrations to advanced students in the special hospitals to which the isolated cases that occur are usually sent. It appears, as is pointed out by Dr. F. Montizambert in the *British Medical Journal* that there has for some years been prevailing in the United States a mild type of small pox that is not recognized, and has received various names, but is often mistaken for chicken pox or rubella. The patients are not exclusively children, are generally not confined to bed or even indoors, and exhibit as a rule but little initial fever; the eruption is scanty and discrete, and there is no secondary fever. According to statistics published by the United States Marine Hospital Service, 11,964 cases of small pox were reported throughout the United States between December 28th, 1900, and March 29th, 1901, with only 157 deaths (1.31 per cent.). A serious danger resides in the very mildness of the cases, inasmuch as, the disease failing to be recognized, proper precautions are not observed and extension takes place readily.—*Marine Hospital Reports*.

THE MANAGEMENT OF SMALL POX IN BALTIMORE.

It is a common source of complaint in other cities throughout the country as well as in Albany that there is not a thoroughly equipped infectious disease hospital. In the City of Baltimore several cases of infectious disease occurred among the homeless and temporary measures had to be taken to provide shelter for them. "It is recognized by sanitarians that if the people of the community would be vaccinated when children, and revaccinated when there is danger of an infection of small pox from the surrounding cities and towns, that it is impossible for an epidemic of the disease to establish itself."—*Annual Report of the Department of Health of the City of Baltimore, Md.*

Recognizing this principle, the health officials of Baltimore have warned the people whenever there was danger; and whenever a case of small pox came to their city, the moment they were informed of it, they had the case removed immediately and quarantined, and all the people who were probably exposed to the contagion were vaccinated, the house was fumigated, the clothing disinfected and in some instances destroyed. This, in addition to the regular vaccination work has prevented in the past year any case of small pox being contracted within the city limits.

All of the 17 cases reported this year were contracted elsewhere. In bringing about this result, the sum of \$700, set aside out of the emergency fund, was expended. What it saved can be imagined when we remember that the small pox epidemic of 1882 and 1883 cost the city through its business interests the sum of \$20,000,000.

CONTAGIOUS DISEASES IN MINNEAPOLIS.

The Department of Health of the City of Minneapolis, Minn., in their annual report state: "During the year we have had 405 cases of small pox with 13 deaths from the same. This epidemic was due to the fact of the extremely mild form of the disease, so much so that many of the

patients never required a physician. The majority of many of our physicians called the mild disease chicken pox." The same conditions prevailed at Albany and it was because of several mild cases about the city during the entire period of the disease that so many cases of small pox developed.

In the City of Minneapolis the quarantine for diphtheria is maintained until the affected membrane is reported free from the bacilli after the bacteriological test. It is quite certain that the antique method of quarantine of four weeks for diphtheria is becoming rapidly obsolete. The method now in use in the City of Albany is the method which is being generally adopted by the health authorities of all cities and appears to be the most satisfactory method of dealing with cases of diphtheria.

Medical News

Edited by H. Judson Lipps, M. D.

CENTRAL NEW YORK ALUMNI ASSOCIATION OF THE ALBANY MEDICAL COLLEGE.—The next meeting of this Association will be held at Fulton, Oswego county, on Wednesday, October 30th, instead of in September as previously planned. All Alumni are cordially invited to be present.

ALBANY GUILD FOR THE CARE OF THE SICK POOR; STATISTICS FOR AUGUST, 1901.—Number of new cases, 44. *Classification of cases*: Dispensary cases receiving home care, 3; dental, 1; other charity cases, 29; moderate income patients, 11. *Classification of diseases*: Medical, 21; surgical, 14; gynæcological, 9. This general classification includes 5 obstetrical cases, 3 throat and nose, 1 eye and ear, 1 skin and 1 dental. Number of contagious diseases in medical list, 4; removed to hospital, 4; died, 4. *Visits of Guild nurses*: Number of visits with nursing treatment, 440; for professional supervision of convalescents, 314; total number of visits for August, 754. Cases were reported to the Guild by the city physician, by 3 of the health physicians, and by 15 other physicians; dental, 2.

EXAMINATIONS FOR ARMY MEDICAL DEPARTMENT.—The examination of applicants for appointment as Assistant Surgeon in the Army has been resumed in Washington and San Francisco; the Army medical boards convened in those cities will remain in session so long as there are candidates to be examined. Seventy-six vacancies in the Medical Department still remain to be filled, and as it is desired by the military authorities that the Department be filled up to its full legal limit, as early as practicable, all eligible applicants will be afforded opportunity for examination;

those found qualified will be commissioned at an early date. Full information as to eligibility, nature and scope of examination, etc., may be obtained upon application to the Surgeon-General, U. S. Army, Washington, D. C.

ILLINOIS' ENDEAVOR TO RID THAT STATE OF QUACKS.—The Illinois State Board of Health has announced to its attorney that it is about to take active measures for the suppression of quack doctors, dispensaries and medical institutes, whose advertisements enrich the daily papers and attract the ignorant masses. Several individuals have been summoned on the charge of practicing without a license, and several cases will soon be heard.

CHICAGO MEDICAL SOCIETY'S BANQUET IN HONOR OF DR. NATHAN SMITH DAVIS.—Under the auspices of the Chicago Medical Society, a banquet and celebration have been organized in honor of Dr. Nathan Smith Davis, M. D., LL. D., who is the oldest living president of the Society and widely known and honored among the profession by his long connection with the American Medical and other associations. The banquet will take place at the Auditorium hotel, Chicago, Saturday evening, October 5, 1901.

THE MEDICAL ASSOCIATION OF CENTRAL NEW YORK.—The thirty-fourth annual meeting of the Medical Association of Central New York was recently held at Buffalo. About 175 physicians from all parts of the State were present. Syracuse was chosen as the place for the next annual meeting, and the following officers were elected for the ensuing year: President, Dr. A. L. Behan, of Canandaigua; secretary, Dr. C. A. Greenleaf, of Rochester; treasurer, Dr. W. M. Brown, of Rochester.

THE POSITIVE PREVENTION OF MALPRACTICE SUITS.—The physicians and surgeons at Anderson, Indiana, have agreed to refuse all services in surgical cases unless they receive an agreement from the patient or his family, releasing them from all liability in the event of any unsatisfactory results. This will preclude all possibility of any malpractice suits, and physicians the world over would be greatly relieved if such practice was followed generally.

OKLAHOMA MEDICAL NEWS; A NEW JOURNAL.—The initial number of the *Oklahoma Medical News* made its appearance in July. It is published monthly under the editorship of Dr. J. R. Phelan, of Oklahoma, with C. A. Phelan as business manager. It is an octavo of thirty-two pages and has a neat appearance. In the rapidly-developing city of Oklahoma this new journal will undoubtedly grow in usefulness, and it is already advocating some needed reforms and urging the adoption of measures which will prove of benefit to the practitioners of that section.

A ROYAL TUBERCULOSIS COMMISSION APPOINTED.—King Edward has appointed a commission to investigate Professor Koch's tuberculosis theory. The scope of the inquiry is officially said to be whether animal and human tuberculosis are identical; whether animals and humans can be reciprocally affected, and under what conditions, if at all, transmission to man occurs,

and the means of combatting it. The commissioners are Sir Michael Foster, secretary of the Royal Society; Dr. Sims Woodhead, Professor of Pathology in Cambridge University; Dr. Harris Cox Martin, Prof. J. McFadyean and Prof. R. W. Boyce. The commission has been granted the fullest powers and facilities, and the members have been urged to make a prompt report.

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.—Under the presidency of Dr. C. S. Minot, of Harvard University, the American Association for the Advancement of Science held its annual meeting for 1901 at Denver, Colorado, recently. The Association proposes to change its time of meeting to the first week in January. Next year such of its sections as choose to do so will meet in Chicago at that time; but a regular annual meeting will also be held at Pittsburg in June. A new section was instituted, entitled: Section K, on Experimental Medicine and Physiology. The presiding officer chosen for the ensuing year is Dr. William H. Welch, of the Johns Hopkins Medical School, and the secretary is Dr. F. S. Lee, of Columbia. The presiding officer of each section is known as a vice-president of the Association.

THE ENNO SANDER PRIZE ESSAY CONTEST FOR 1901-1902.—Under the auspices of the Association of Military Surgeons of the United States, the Enno Sander prize has, for 1901-1902, been generously increased by its founder to consist of a gold medal, valued at one hundred dollars, and one hundred dollars in cash. The subject for this year is "The Most Practicable Organization for the Medical Department of the United States Army in Active Service." The Board of Award for this essay will be composed of the following members: Hon. William Cary Sanger, Assistant Secretary of War; Brigadier-General George Miller Sternberg, Surgeon-General, U. S. Army, and a distinguished officer of the line to be announced later. All inquiries regarding the conditions of the competition for this prize essay should be addressed to James Evelyn Pilcher, secretary, Carlisle, Penn.

SEMI-ANNUAL MEETING OF THE MEDICAL SOCIETY OF THE STATE OF NEW YORK.—The Medical Society of the State of New York will hold a semi-annual meeting in Hosack Hall, New York Academy of Medicine, No. 17 West 43rd street, New York City, on October 15 and 16, 1901. The program will be as outlined:

Tuesday, October 15, 1901, 9:30 A. M. to 1 P. M.—A Contribution to the Pathogenesis of Narcolepsy and other Forms of Morbid Sleepiness, by Heinrich Stern, New York. The Dyspeptic Heart, by James E. Crook, New York. The Official Relation of the Medical Profession to Private Charitable Institutions, by Enoch V. Stoddard, Rochester. Cerebral Apoplexy, by Edward D. Fisher, New York. The Causes and Treatment of Epilepsy, by W. P. Spratling, Sonyea. Hallucinations: Their Pathogenesis, Clinical Import and Medico-Legal Value, by J. Leonard Corning, New York. Note on the Refinement of the Technique of Spinal Anesthesia, by J. Leonard Corning, New York. Tropacocaine in Spinal Anes-

thetia, by Willy Meyer, New York. Therapeutics and the Drug Manufacturer, by B. W. Loomis, Syracuse. Prolonged Medication, by A. Jacobi, New York. Muscular Atony as the Principal Factor in Uterine Displacements, by Henry C. Coe, New York. A Brief Outline of the Surgical Procedure in Tubal Pregnancy, with Report of Case, by H. T. Williams, Rochester. The Treatment of Chronic Endometritis, by Hermann J. Boldt, New York.

Tuesday, October 15, 1901, 2:30 P. M. to 6 P. M.—Some Facts and Fallacies concerning Pulmonary Tuberculosis, by John H. Pryor, Buffalo. Some Notes on the Early Diagnosis and Treatment of Pulmonary Tuberculosis, by J. Elwood Stubbett, Liberty. The Association of Pulmonary Tuberculosis with both Primary and Secondary Endocarditis, and the Effect of Valvular Disease upon Lung Tuberculosis, by J. M. Anders, Philadelphia, Pa. Dysmenorrhea, by Matthew D. Mann, Buffalo. Cancer of the Uterus, by William R. Pryor, New York. Abdominal Actinomycosis, with Illustrations and Report of a Case, by Albert Vander Veer, Albany. Old Age as a Factor in the Cure of Hernia, by W. B. De Garmo, New York. Problems in the management of Tubercular Disease of the Hip, Based upon Records in Private Practice, by Virgil P. Gibney, New York. Mechanical and Operative Treatment of Hip Disease, and Disease of the Spinal Vertebræ, by A. M. Phelps, New York. The Difficulties Encountered by the Sanitarian in Dealing with Smallpox, by Ernest Wende, Buffalo. The Clinical Symptoms of Advanced Cardiac Disease, of Cases in which the Right Heart is Relatively Most at Fault, by Louis F. Bishop, New York.

Tuesday, October 15, 1901, 8 P. M.—The Advantages of Stereoscopic Radiography, by L. A. Wiegel, Rochester. Symposium On Some Diseases of the Liver and Bile Passages. The Diagnosis of Gall Stones and their Aberrances, by Charles G. Stockton, Buffalo. Courvoisier's Law, by Richard C. Cabot, Boston, Mass. The Infections of the Gall Bladder and Bile Ducts, by M. H. Richardson, Boston, Mass. Intestinal Obstruction due to Gall Stones, by L. S. Pilcher, Brooklyn. Technique of Gall Bladder and Duct Operations, by S. J. Mixter, Boston, Mass. Cholecystectomy, by C. L. Gibson, New York. Syphilis of the Liver, by Simon Flexner, Philadelphia, Pa. Tumors of the Liver, by G. B. Fowler, Brooklyn.

Wednesday October 16, 1901, 9:30 A. M. to 1 P. M.—The Physiological and Clinical Action of Normal Salt Solution, with Indications for its Use, by W. H. Heath, Buffalo. Medical Aspect of Appendicitis, by W. E. Ford, Utica. Aspiration of Wire Nail; Gangrene; Septic Pneumonia, by Francis Huber, New York. The Etiologic Potency of Heredity in Mental Disease, by Carlos F. MacDonald, New York. The Pathology and Treatment of Migraine, by William H. Thomson, New York. A Few Urinalysis Deductions, by Hamilton D. Wey, Elmira. Method of Incising, Searching and Suturing the Kidney for Stone, by Howard A. Kelly, Baltimore, Md. The Technique of Nephropexy, by Geo. M. Edebohls, New York. Morcellement and Bisection of the Uterus in Complicated Abdominal Hysterectomy, by Willis G. Macdonald, Albany. The Immediate

Repair of Injuries of Parturition, by A. L. Beahan, Canadaigua. A small-pox Epidemic in an Orphanage, by Frederic C. Curtis, Albany, and H. L. K. Shaw, Albany. Report of a Case of Non-Traumatic Perinephric Hemorrhage, by Arthur Booth, Elmira.

Wednesday, October 16, 1901, 2:30 P. M.—Are the Tonsils to be Regarded as One of the Normal Organs of the Body? by F. H. Bosworth, New York. The Early Diagnosis and Treatment of Acute Mastoiditis, by T. H. Halstead, Syracuse. History and Presentation of a Case of Cerebral Abscess Complicating Chronic Otitis Media, by Robert Lewis, Jr., New York. Some Conditions Antecedent to Cancer of the Breast, by B. F. Curtis, New York. Ligation of the Abdominal Aorta for Aneurism, by Robert T. Morris, New York. Observations of the Treatment of Croupous Pneumonia, by J. C. Wilson, Philadelphia, Pa. The Clinical Evidence of Myocardial Conditions, by John L. Heffron, Syracuse. A Case of Intermittent Claudication, Terminating in Gangrene, by I. H. Levy, Syracuse. The Present Status of Ophthalmic Science and Art, by D. B. St. John Roosa, New York. The Beneficial Effect on the Eyes from the Use of the Stereoscope, by A. Edward Davis, New York. Glaucoma Simplex, by Peter A. Callan, New York. The Evolution of Typhoid Fever Theories, by Richard Stein, New York.

Wednesday Evening, October 16, 1901, 8 P. M.—A reception will be tendered the members and guests.

PERSONALS.—Dr. F. B. WEAVER (A. M. C. '98), has located at Hyde Park, N. Y.

—Dr. T. B. VAN ALSTYNE (A. M. C. '79), has recently purchased a fine residence at 10 Virgil street, Binghamton, N. Y., where he may now be addressed.

—Dr. EUGENE E. HINMAN (A. M. C. '99), recently resigned from his position as resident physician at the Albany County Hospital. He has lately been appointed Deputy Medical Inspector-General of the Equitable Life Insurance Company for New York State, Vermont and Canada.

—Dr. CLAYTON KENDALL HASKELL (A. M. C. '01), has been appointed a resident physician of the Albany Hospital, to succeed Dr. Thomas Cunningham, of Sandy Hill, who resigned owing to ill health. Since graduation Dr. Haskell has been resident physician and surgeon of the Saratoga Hospital.

Book Reviews

Uterine Fibromyomata; Their Pathology, Diagnosis and Treatment, by E. STANMORE BISHOP, F. R. C. S. Eng., President Manchester Clinical Society; Fellow of the British Gynæcological Society; Honorary Surgeon Ancoats Hospital, Manchester, etc. With 49 Illustrations. Philadelphia: P. Blakiston's Son & Co. 1901.

This work of special interest to the gynæcologist is valuable to the general practitioner as well. It will afford the latter an adequate idea of the latest progress in our knowledge regarding this comparatively common

and often troublesome form of tumors, and will make possible intelligent advice when such cases present themselves in private practice.

The anatomy, development and secondary changes occurring in uterine fibromyomata are described in so far as is necessary for a clear idea of their nature. Their symptomatology and diagnosis are fully considered, while the subject of their treatment, including the various operative measures and technique, together with the results to be obtained, is particularly set forth.

The following are some of the conclusions reached:

That medical treatment is generally unavailing.

That electricity is useful in cases where hemorrhage is the chief symptom; but in cases of œdematous, calcareous, fibrocystic, sarcomatous, or necrobiotic fibromyoma, it is useless or harmful. While, if inflammatory conditions, such as ovaritis, or pyosalpinx, are present, the use of electricity leads to serious consequences.

That in cases where the tumor occasions no disturbing symptoms, it is better to let well enough alone. But where disturbing symptoms are present, early operation should be advised, while there is yet prospect of a successful outcome, before the patient has been exhausted by the disease, and before complications arise which greatly increase the risk and which often make relief impossible.

The author favors hysterectomy by the vaginal or abdominal route, more frequently by the combined routes, depending upon the conditions present in individual cases, and prefers to leave the ovaries *in situ* if they are free from disease.

LYMAN ASA JONES.

A Text-Book of Gynecology. Edited by CHARLES A. L. REED, A. M., M. D. President of the American Medical Association (1900-1901); Gynecologist and Clinical Lecturer on Surgical Diseases of Women at the Cincinnati Hospital; Fellow of the American Association of Obstetricians and Gynecologists; Fellow of the British Gynecological Society; Corresponding Member of the National Academy of Medicine of Peru, etc. Illustrated by R. J. HOPKINS. New York: D. Appleton & Company. 1901.

It is always a matter of great interest to observe how a new book upon any surgical subject is received by the profession-at-large.

If one is to judge from the pleasing reviews and endorsements that have thus far appeared in the medical journals, and from personal conversation with the friends of the author, the latter certainly has much over which to feel grateful. His efforts in bringing before the thoughtful practitioner of medicine a new work on gynecology are certainly being appreciated.

Dr. Reed, in his preface, says, "The first endeavor has been the formulation of a text-book which shall serve as a working manual for practitioners and students, and which shall embrace the best approved developments of gynecology, including those of later date, that are, or can be included in a work of similar magnitude by a single author." In this he has succeeded very well, although the book goes into the subject a little

too exhaustively to be of use to most students as a text-book. The assignment of subjects to different authors, who are authorities in their respective departments, but who are not gynecologists, is a good idea, and makes for the success and usefulness of the book. The editor has so put together the different authors' work that it is hard to believe the book has not been written by one man. The illustrations are good and help to the understanding of the text in a very marked manner. The book is not padded with illustrations, neither are there too few.

The first twelve chapters are devoted to the general considerations of gynecology, preparation of the patient, instruments, etc. The chapter on anæsthesia and anæsthetics in gynecology is very appropriate, although it contains no more than is to be found in any first-class work on surgery. The chapter on instruments is, properly, very brief, each set being described with that particular operation, and so fixed in the operator's mind much better. The next six chapters are devoted to the anatomy, injury, infections and diseases of the skin, and neoplasms of the external genital organs. Then follow the two chapters on displacements of the vagina, the pelvic floor and its injuries. The subjects in the following chapters are arranged as follows: malformations, displacements, injuries of, foreign bodies in, infections of and neoplasms of the uterus; a very instructive chapter on Caesarian section and its modifications; malformations, displacements, infections and inflammations of, and their treatment, trophic diseases and neoplasms of the ovaries. The chapter following this, on ectopic pregnancy, by McMurtry and Herzog, is really the best in the book. Then come the chapters on neoplasms and infections of the broad ligaments, menstruation, and the book ends with a few chapters on the female urinary organs, the rectum and anus.

On the whole the book is well-arranged and the subjects carried out in good sequence. The work is one that every gynecologist should own.

A. V.

Photographic Atlas of the Diseases of the Skin. A Series of Eighty Plates, Comprising more than One Hundred Illustrations, with Descriptive Text, and a Treatise on Cutaneous Therapeutics. By GEORGE HENRY FOX, A. M., M. D. Clinical Professor of Diseases of the Skin, College of Physicians and Surgeons, New York; Consulting Dermatologist to the Board of Health, New York City; Physician to the New York Skin and Cancer Hospital, etc. Philadelphia and London: J. B. Lippincott Company. 1901.

This is an elaborate quarto issued in fasciculi, each containing five plates, with descriptive text, and chapters on the treatment of skin diseases. Parts I, II and III have been issued. Part I presents plates of *acne vulgaris faciei*, *eczema erythematosum*, *syphiloderma erythematosum*, *zoster pectoralis* and *dermatitis venenata*. The fourteen pages of text are given to "General Considerations" of the subject of dermatology. The plates of Part II illustrate *acne vulgaris dorsi*, *phtheiriasis corporis*, *psoriasis guttata*, *pityriasis maculata* and *variola (vesiculosa and pustulosa)*, the subject matter of the fasciculus being upon the treatment of acne. In Part III

are given plates of *lupus erythematosus*, *lupus vulgaris*, *syphiloderma papulosum*, *vitiligo manuum* and *lichen planus*, and the text is upon alopecia.

This work presents many admirable features. The plates are naturally examined at first for their points of interest. The method of reproduction, by a combined photographic and lithographic process, is a modern achievement of the printer's art, yielding much softer and more natural tones than older color prints from stone. The bright hues and sharp contrasts of earlier plates to illustrate the affections of the skin have been misleading and disappointing, leaving publications of this character in some disrepute, but in the present work the fidelity to nature is very striking. For the excellence of the plates, and the evident care in their manufacture, both the author and publisher deserve great praise. The letter press is also particularly pleasant to the eye.

The excellence of the illustrations is fully sustained by Dr. Fox's dissertations upon the management of skin diseases. Comparing his opinions with those of a generation, or even a decade, ago, we find a much more liberal recognition of the systemic relations of cutaneous affections, and, as in other departments of medicine, a greater insistence upon the general care of the body, both in prophylaxis and in treatment. Dr. Fox wields a facile pen, and the technicalities of his sermons are softened by a touch of wit and irony which render them attractive reading. It is to be hoped that the profession will universally profit by the opportunity given by the Atlas, and scatter broadcast the leaven of common sense which characterizes its pages.

A Compend of Human Physiology. By ALBERT P. BRUBAKER, A. M., M. D. Tenth Edition, revised and enlarged. Philadelphia: P. Blakiston's Son & Co. 1900.

Speaking in general of quiz-compends, it is agreed that they have their proper sphere of usefulness. In connection with a text-book of physiology, the student often desires a concise statement of facts. This want is met by Dr. Brubaker's compend without the disadvantage of too great brevity. The book is very complete for its kind.

W. E. M., JR.

Introduction to the Differential Diagnosis of the Separate Forms of Gallstone Disease. Based upon His Own Experience Gained in 433 Laparotomies for Gall Stones. By Prof. HANS KEHR HALBERSTADT. Authorized Translation by WILLIAM WOTKYNS SEYMOUR, A. B., Yale, M. D., Harvard. Formerly Professor of Gynecology in the University of Vermont; Fellow of the American Association of Obstetricians and Gynecologists; Surgeon to the Samaritan Hospital, Troy, New York. With an Introduction by Prof. KEHR. Philadelphia: P. Blakiston's Son & Co. 1901.

The book consists of a series of four lectures with an appendix. The author has had a wide experience in diseases of the gall-bladder, and this he presents in a very interesting way. It is a book not alone for the surgeon, but the general practitioner as well. The author takes up the dif-

ferent diseases of the gall-bladder in a regular sequence, giving the differential diagnosis, etc., and telling when the surgeon ought to be called in, when an operation should be done, and when it can be avoided.

It is a practical work and very much condensed, in fact too much so in some places. The translator deserves great praise for the excellent work he has given the profession at large.

A. V.

Current Medical Literature

SURGERY

Edited by A. Vander Veer, M. D.

Contribution to the Study of the Treatment of Malignant Tumors and of Their Parasites. (Contribution a l'étude du Traitement des Tumeurs Malignes et des Parasites de cette affection.)

WLAEF. *Comptes Rendus de la Société de Biologie, Tome LIII, No. 5, 1901.*

The author states that he has been able to find and to cultivate a form of blastomyces from various malignant tumors. He cites three cases in which he found them, a sarcoma of the ovary in a young girl, a sarcoma of the cheek in a young man, and epithelioma of the tongue in a man of forty-two. He has also been able to produce tumors in animals by inoculation with these blastomyces, and furthermore has been able to immunize animals and produce an antitoxic serum. He claims to have produced decided amelioration in a number of individuals with typical new growths of a malignant type by inoculation with his serum. These results are criticised by Boirel, who claims that the so-called tumors produced experimentally are generally not true tumors, but are inflammatory lesions. He claims that in one instance he has seen an adenomatous growth in the neighborhood of these inflammatory areas, but never a true malignant growth. He also criticises that statement of Wlaeff that all forms of malignant growth can be produced by the same organism.

Perityphlitis in Children. (Die Perityphlitis des Kindes.)

PAUL SELTER. *Archiv für Kinderheilkunde. Band 31, Heft 1 & 2.*

The author has had twenty-eight cases of perityphlitis in children between the age of three and seventeen years since 1896. He believes the disease is not infrequent in childhood, and now that we are becoming more familiar with its symptoms we recognize it oftener. The appendix is relatively longer and wider in children. The ratio between its length and that of the colon is 1:10 in infants and 1:20 in adults, and the lumen is wider. The appendix grows with the intestines to the twelfth or thirteenth year, remains stationary to the twentieth and then atrophies, so that its lumen is smaller at fifty years than in infancy.

Ribbert did not find any fecal concretions in appendices of children under five years. This is explained by the fact that the fecal matter can enter the appendix readily, and as readily be expelled by the muscular contractions of the processus vermiformis. If, however, there is a slight catarrhal

inflammation of the intestinal tract, so frequent in childhood, the lumen is narrowed and the concretions are less easily expelled. This causes colicky pains, and we have an attack of appendicitis or typhlitis simplex. The author claims this is very frequent and generally masquerades under the name of colic, inflammation of the bowels or indigestion. The pathology is the same as in adults, and the author describes the catarrhal, ulcerative, perforative and gangrenous forms. There was general peritonitis in six of the author's cases, circumscribed abscesses in eleven and the remaining eleven healed spontaneously without any after effects. Simple appendicitis occurs in the course of an enteritis or after some error in diet when the child complains of a severe pain in the right iliac region. There may be vomiting, diarrhoea or constipation, fever and a rapid small pulse. Locally nothing can be detected save the tenderness on the right side. The attack is over in a short time and the child is apparently perfectly well. The clinical picture in circumscribed perityphlitis is rather different, and the subjective symptoms are more marked. The abdomen is tense and a resistance can be felt low down on the right side, and later a tumor can be made out. After a few days the acute symptoms subside and the swelling disappears, or it may go on to suppuration which most frequently burrows down into the true pelvis. Many of the symptoms may be atypical or absent, but the author found in all his cases a resistance on the right side of the pelvis. He urges that where there is the slightest suspicion of perityphlitis a rectal examination be made even in young infants. Selter does not believe in operating immediately in every case, but advocates the expectant plan. If under proper treatment the child grows no better in two or three days he operates at once.

Spontaneous Gangrene. (Zur Kasuistik der Spontangangrän.)

STANKO MATANOWITSCH. *Beiträge zur klinischen Chirurgie. Band 29, Heft 3.*

The writer presents an exhaustive study of the subject of spontaneous gangrene as illustrated by the cases occurring in the Heidelberg clinic in the last decade.

Under the heading of spontaneous gangrene are included those forms of gangrene not due to external causes. Virchow's studies in connection with thrombosis and embolism have thrown much light upon certain cases of spontaneous gangrene. Furthermore, certain changes in the blood vessels, as well as in the constitution of the blood itself, explains certain cases of this nature. Spontaneous gangrene is due either to pathological changes of the vascular system or to nervous disturbances. Angiosclerosis is the most common cause of spontaneous gangrene. These cases may be divided into the senile and pre-senile. There is also a definite relationship between spontaneous gangrene and certain chronic infectious diseases, certain diatheses, as well as certain toxic conditions.

The neuropathic changes may be either central, as in syringomelia, or peripheral as in leprosy, and finally there are certain cases of spontaneous gangrene, the etiology of which is not understood. In regard to pre-senile gangrene one group of investigators believe it to be due to a pro-

liferation of the intima of the vessels, while another group believe it to be due to a thrombosis with subsequent organization of the thrombus. The treatment of both the senile and pre-senile forms is hot applications until the demarkation line has formed, and then amputation. If, however, there is much infection, amputation is done at once.

The most important variety of neuropathic gangrene is Raynaud's disease, characteristic of which is a gangrene which tends to attack symmetrical parts of the body. It is generally preceded by a period of more or less generalized disturbance of the nervous system, following which certain parts of the body suddenly become cold, either pale or cyanotic, and in these parts there are usually paræsthesias or severe neuralgic pains, and finally gangrene often follows. Raynaud believed the condition to be due to a spastic contraction of the small blood vessels caused by an abnormal vascular innervation, which he believed to be due to a disturbance of the vascular nerve centers.

Certain writers have reported cases in which tabes, hysteria, syringomyelia, multiple neuritis, as well as tumors of the spinal cord have been assumed to be the cause of spontaneous gangrene.

A Case of Tetanus Treated with Serum. (Ein Fall von Tetanus behandelt mit Serumeinspritzung.)

LANDAN. *Jahrbuch für Kinderkrankheiten. Band 53, Heft 2.*

A child five years old was brought to the hospital who had been sick for over three weeks with what the attending physician diagnosed as typhoid fever. For two weeks before admission the child had been restless and unconscious, and had had a number of convulsions. When admitted, the mouth could hardly be forced open wide enough to admit of feeding with liquid nourishment. There was much difficulty in swallowing, and every few moments there would be a convulsive attack in which the legs would be extended and the head drawn back. An examination of the child revealed a slight wound over one of the scapulæ. As there was no doubt of the diagnosis, thirty cubic centimeters of antitetanus serum were injected. In the course of the next three days eighty more cubic centimeters were administered, and ten days after the first injection the child was able to be up and around and could articulate distinctly.

MEDICINE

Edited by Samuel B. Ward, M. D.

The Relations between Diabetes Mellitus and Locomotor Ataxia. (Ueber die Beziehungen zwischen Diabetes mellitus und Tabes dorsualis.)

WILHELM CRONER. *Zeitschrift für klinische Medizin, Band 41, Heft 14, 1900.*

There are so many symptoms common to these two diseases that at first sight confusion in the diagnosis is not to be wondered at. These include: spots of anæsthesia or analgesia; paræsthesias, as prickling, pressure, heat and numbness in the limbs and sexual organs; neuralgias, which often as symmetrical and severe sciatica simulate the tabetic lan-

cinating pains; loss of sexual desire; trophic and secretory disturbances, especially perforating ulcer, decubitus, hyperidrosis, muscular atrophy; mablyopia, amaurosis. Althaus maintains for the differential diagnosis, the manifestations of the knee-jerk, and of the pupillary reaction. The knee-jerk, however, in exceptional instances, may be lost in diabetes, and pupillary anomalies may also occur. Some writers have attributed the tabetic symptoms in the course of diabetes to a condition of pseudo-tabes, due to neuritis, and neuritic conditions have been found, whereas in diabetes, spinal cord lesions are unknown. But the differentiation of peripheral nerve disease from spinal cord disease is not always easy. In recent years this has been especially true of tabes, as the disease may be ushered in by ambiguous symptoms, as gastric crises, long before the pathognomonic triad, Westphal's phenomenon, lancinating pains and the Argyll-Robertson pupils, are apparent. The writer reports several cases from the literature, and from his own observation, and in one instance reached a conclusion, favoring tabes, from the presence of bladder lesions, which could not well be assigned to peripheral nerve affection. The complications of cord lesions, by diabetes insipidus or diabetes mellitus, are well understood, as the disease may extend to parts functionally concerned in the control of the urinary excretion. As to the causes of the two diseases, there is much in common. Both may occur in predisposed families, so that an interchange is noted, one member of a family presenting some nervous disease, and another diabetes. Syphilis is operative in both conditions, although in tabes only as a predisposing factor. Arteriosclerosis is also to be considered, and the relations of syphilis to this lesion. When diabetes complicates previously existing locomotor ataxia, the assumption of an extension of the cord lesion to the vagus nucleus of the medulla is to be given due weight.

The Prognosis of Aortic Aneurysm. (Ueber die Prognose bei Aortenaneurysmen.)

KOTOWTSCHICOFF. *Zeitschrift für klinische Medicin*, No. 41, Heft 4 and 5, 1900.

A majority of physicians consider that aneurysm of the aorta is a hopeless disease. For a long time it has been observed that this affection occurs very frequently among syphilitics. The cause of the aneurysm is due to an endarteritis. Some investigators have found inflammatory changes in the tunica media. The writer holds that the aneurysm is caused primarily by these inflammatory changes. As the disease progresses, the fresh inflammatory processes subside and connective tissue is formed, which involves the whole thickness of the media. At the place where this tissue is formed the widening of the vessel begins. Thus the development of an aneurysm is progressive, and to stop the course of the disease the inflammatory process must be checked. Four cases are described in which the aneurysms became much smaller under the use of potassium iodide. He gives large doses for a long period combined with mercury. When the patients had to dis-

continue its use on account of loss of appetite, pain in the stomach, etc., the disease perceptibly advanced. The good influence of the iodides is shown by a decrease of the pain, improvement in the symptoms and a diminution in the size of the tumor. Attention is called to the great service rendered by the Roentgen rays in making an early diagnosis of aneurysm. The author believes that the prognosis of aortic aneurysm is not bad. In some cases a complete recovery will follow the continued use of potassium iodide, and in nearly all will the process be held in check for a long time.

Cholelithiasis (Ueber Cholelithiasis.)

WOLFLER. *Prager medicinische Wochenschrift*, November 1, 1900.

Treatment—Those cases which do not produce distress should not receive either medical or surgical treatment. The first acute attack should be treated by poultices to induce absorption of the inflammatory products, later with oil or glycerine enemata and salicylate or glycocholate of soda internally. In chronic lithiasis, when the attacks of gall stone colic are frequent, Naunyn recommends operation. Those cases, however, of lithogenous obstructive icterus in old people, or where severe bile poisoning has appeared, are not suitable for operation on account of the irreparable changes which have already occurred to the cells of the liver. All the operations may be placed in three groups:

1. The gall bladder or biliary passage, in rare cases the liver itself, is opened for the removal of the gall stone, then sewed up or left open.
2. Before or after removal of the gall stone, the gall bladder is extirpated with resection of the biliary passage.
3. When the gall stone or the obstruction to the passage of bile cannot be removed, then the bladder or biliary passage is connected with the intestine in order to secure an outlet for the bile.

The cholecystotomy with suture is the favorite operation in England, the cholecystostomy in Germany, and the extirpation of the gall bladder in France. Langenbuch recommends the removal of the gall bladder since the catarrh of its mucus membrane is the source of the stone formation, and while gall stones may be found in the finer bile passages, it is a very rare occurrence. Then, too, when the bladder is not removed the fistula and the adhesions may give much discomfort. For the cystostomy are the facts that all the stones are not always removed, and therefore that stones may pass into the ductus choledochus, that the bile may be infectious and thus easily burst through the stitches, and third, when a stone is in the ductus choledochus, it would be well to have a reservoir for the bile. The cystostomy is certainly less dangerous than the extirpation, and therefore should be chosen for patients who are much reduced. The mortality in 700 gall stone operations by German surgeons is not more than four to five per cent. and by some operators only three per cent. The choledochus operation is more dangerous, and has a mortality of seven per cent. In comparison, Nannyn, who had 150 patients under relatively short medical treatment, lost seven patients, 4.6 per cent. While the number relatively cured by Nannyn was forty per cent., the surgeons claim a radical cure in seventy-five per cent.

DERMATOLOGY

Edited by F. C. Curtis, M. D.

*Some Fallacies as to Syphilis.*JONATHAN HUTCHINSON. *The London Polyclinic, September, 1900.*

Maxwell wrote that "Syphilis appears in six or eight days after contagion; yaws take from six weeks to three months." We now know that although a venereal sore from contagion may appear within a few days of exposure, it is usually not a syphilitic one, and that the real period of incubation for syphilis, that preceding the constitutional symptoms, is exactly that assigned by him to yaws. After Maxwell's time of writing arose the opinion that syphilis could occur but once in a lifetime. The truth lies between these two creeds. Second and even third attacks of complete syphilis may occur, though they are rare. A developed attack of syphilis does confer a sort of immunity; complete and lasting in some cases, imperfect and transitory in others. Sometimes a hard chancre is autoinoculable. Within a year of the first syphilis another well-characterized chancre has been acquired, in some cases. A very prevalent fallacy respecting syphilis is that the full role of phenomena is to be expected in each case. Nothing is further from the truth. Complete cases are rather exceptional. The chancre may be omitted, or may escape observation though carefully sought. The bubo, sore throat and eruption may be omitted. Some writers mention iritis as if it were an ordinary feature of constitutional syphilis. It really occurs in about one-fifth of one per cent. of cases. Chancres otherwise located than on the genitals are not usually easy of diagnosis. Midwifery chancres on the fingers of medical men are rarely diagnosed correctly before the eruption appears. Characteristic induration is usually absent from chancres not on the genitals. With females it is not often present, even on the genitals. Sores on the skin which are, really, primary chancres, may be of very insignificant appearance, or, *per contra*, their very magnitude may be the misleading feature. As a rule they excite no suspicion until the constitutional symptoms appear. Victims of syphilis are not always seriously ill; it affects some with terrible severity and leaves others almost unhurt.

*Lupus-Cancer.*JONATHAN HUTCHINSON. *The London Polyclinic, March, 1901.*

The subject of Lupus-Cancer is one of very considerable interest to the student of new growths and of what may be called "malignant action." Less than a century ago it was held that there was a mutual exclusiveness between cancer and tuberculosis. That idea must now be abandoned, for it is proved that cancer of a most malignant and rapidly growing type may actually develop in tuberculous tissue. The form taken by the new growth is almost exactly alike in all cases, and consists of a hard-edged, roundish ulcer. The edge is "rolled" and "polycyclical," like that of a rodent ulcer, only much thicker and more bossy. The progress is very rapid, and in the course of a few months that which looked as if it were going to be a deep ulceration has developed a florid mass of fungating growth.

This growth may attain an enormous size. We know of no other form of cancer in which the tendency to fungate is so constantly developed or attains to such dimensions. The next point of interest to be noted is that, although numerous histological examinations have shown that the ordinary elements of epithelial cancer, nested cells, etc., are present, there is little or no tendency to glandular infection. No case has, we believe, been recorded in which lupus-cancer, situated on the head or face, caused infection of the glands or viscera. It would appear, however, to be somewhat different when the disease occurs on the extremities; for in two or three instances in which the hands were its site, the axillary glands have been implicated. This, it may be noted, is in keeping with certain items of evidence respecting rodent ulcer itself, for in this latter the topographical location (the face) appears to exercise considerable influence in determining the escape of the glandular system. It would appear that patients with Lupus-Cancer rarely survive the second year, and that the cause of death is usually exhaustion from hæmorrhages and discharge from the local fungus. Side by side with this statement, however, we have the more cheering one that a complete excision of the local growth is a very hopeful measure, and may be followed by many years of immunity. This fact suggests that the infection of the adjacent parts in contiguity with the growth does not extend so widely, and is, of course, in keeping with the other fact that the lymphatics escape.

In both of these features Lupus-Cancer appears to resemble the crateriform ulcer. In the latter, after free excision there is rarely any return, and although implication of the glands has been proved in a few instances, it is decidedly exceptional.

On Yaws as observed in Fiji.

MORGAN FINUCANE. *The London Polyclinic, April, 1901.*

The author has practiced medicine seven years in Fiji, and this article is a report to the standing committee on yaws. The main question is, naturally, as to the identity of yaws and syphilis. The article is very interesting. He writes that he knows of no medical man who has seen a hard chancre in the case of a Fijian. He assumes that Fijians are protected by being syphilized by yaws; that they are a very immoral race and have ample opportunity to contract primary syphilis, were they susceptible. Most of the severely syphilized children are still-born—causing a very large still-born mortality in the islands. Mercury is little used by medical men in Fiji, for the treatment of yaws. The only way to keep the majority of Fijians in good health is to put them on a three months' course of the iodide of potassium (ten to twenty grains, t. d. s.) periodically. Fijians are free from early syphilitic lesions, but very prone to late, secondary syphilitic manifestations. His conclusions are:

1. The disease is a chronic and continuous one, and the subsequent phenomena seen in Fijians during adult and old life are sequelæ of the early infantile yaws that the race suffers from.

2. The 'early infantile' and late adult eruptions are polymorphous and symmetrical, presenting in early life more commonly vesicular, papular,

and pustular forms, whilst in later life the tendency is to scaly, isolated, papular ones, psoriasis, rupial and ecthymatous sores, tubercular and lupoid forms of ulceration.

3. All Fijian yaws eruptions become of a raw ham-like appearance, leaving a well-marked pigmented discoloration, well seen even in the darkest types of natives.

4. No primary yaws sore corresponding to a hard chancre can be found; unless the mother yaw sore can be said to be one.

5. There is in all Fijians a general chronic adenitis of a shotty character. This is also noticed in Indian Coolies and Europeans suffering from yaws. It is an adenitis quite distinct from that produced from filariasis, the latter a disease very common on the islands.

6. The early bone pains and cachexia are similar to those noticed in early syphilis in Europeans.

7. The later secondary yaws troubles, such as periosteal nodes, skin eruptions, ulcerations of skin, superficial and deep nodular masses on the skin and deeper parts eventually breaking down into punched-out ulcers, ulceration of soft palate, mouth, tongue, and bones, with induration, with many later nervous phenomena pointing to gummatous infiltration are all indistinguishable from the later manifestations of syphilis.

8. Eye troubles of cornea, iris, and deeper structures are common amongst Fijians, but whether due to yaws he is not prepared to say, but thinks it extremely probable.

9. Early abortion and miscarriage are the rule amongst Fijian women, most often inexplicable after very strict enquiry as to other causes than a yaws taint of the decidua.

10. Typical cases of hereditary (yaws) syphilis are occasionally seen in Fijians, though they are uncommon, and I explain this by saying that severely syphilised (yaws) Fijian women abort or children born badly syphilised (yaws) die early, masking the symptoms of hereditary taint, and healthier children survive without marked symptoms of hereditary, only to develop later the second symptoms.

Commenting on the report of Mr. Finucane, Jonathan Hutchinson writes, in the same issue of *The Polyclinic*, that its statements are very important; that many persons will suppose them to decide the question of the identity of yaws and syphilis; that Mr. Finucane does not, perhaps, go quite so far, but his facts do. Fijians seem unable to contract syphilis. Forms of tertiary syphilis are very common among them, but typical, indurated chancres are not found. If the statements of this report and the inferences from them are borne out by further experience, a most interesting chapter in the natural history of syphilis, will thereby be opened. Here is a community in which the disease has prevailed without repression (and even with encouragement) from time immemorial. It has not been regarded as a sexual disease, simply because it has been communicated habitually in early periods of life, by other means. It had been insisted, by those who have held that it is a malady distinct from syphilis, that no instances of

its inheritance are seen. Mr. Finucane tells us, however, that he has seen such cases. That they should be infrequent is what ought to be expected under the peculiar conditions, since most of the parents would have passed through the disease many years before marriage.

The Use of Rattlesnake Poison in Leprosy. (Ueber die Anwendung des Giftes der Klapperschlange bei Lepra.)

ADOLPHO MARCONDES DE MOURA (BRASIL). *Deutsche medicinische Wochenschrift*, November 29, 1900.

The author states that he has for years been studying the effects of the poison of the *Crotalus durissimus* on Leprosy. The inhabitants of the interior of Brasil have for a long time eaten rattlesnakes for the cure of skin diseases of various kinds. Every part of the snake except the head with the poisoning glands, is used in this way. This same remedy is also used for leprosy, and the inhabitants believe that if a leprosy victim is bitten by a rattlesnake and does not die as a result of the bite, he will be free from the disease for the rest of his life. The author had been frequently assured by the natives that people afflicted with leprosy had been cured after being bitten by a rattlesnake. He then experimented with the poison on animals, and having determined what dose could be safely used, treated cases of leprosy both by the internal administration of the poison and by injections. He obtained the poison from the living snake by gently squeezing the region where the poisonous glands are located, causing the snake to project the poison. This is caught on sterile cotton which is placed in glycerine diluted with an equal amount of water. It is frequently shaken and the cotton allowed to remain in the glycerine several days, the poison from a number of snakes being added from time to time. The author's experiments were made on dogs of a certain weight, and the proper dose of the poison determined. For example: Taken for granted that 300 cubic centimeters of the diluted glycerine contains the poison of a certain number of snakes. One cubic centimeter of this solution is injected every twenty minutes into a dog weighing, say fifteen kilograms. If, then, after four injections, or after using four cubic centimeters of the mixture, the characteristic symptoms of poisoning appear,—then sixteen cubic centimeters of the solution would be sufficient for a person of middle weight or about sixty kilograms—about three cubic centimeters of the mixture being administered internally twice a day, and for injections one and six-tenths cubic centimeters being used. The patient is given the remedy internally for about a month, and then the injections are started. The author's first case was that of a mullatress. She had had leprosy for ten years, and was in such a miserable condition that she was confined to her bed most of the time. The remedy was given internally, and the further course of the disease was checked. Many of the symptoms were also much improved. Patient was later given fifteen injections, which caused a much more rapid improvement. Patients appear to establish a tolerance for the remedy, and while the first injections cause localized swelling, the later ones do not produce any irritation. Author has treated in this way fifteen

cases of leprosy, fourteen being forms of *lepra tuberculosa*, and one a case of *lepra nervosa*. In all cases a steady improvement was noted. The nodules on the skin disappeared, the ulcerations healed rapidly, and the infiltrated and enlarged lobules of the ears returned to their normal dimensions in a short time. The affections of the nose, *i. e.*, the *ozæna*, which was present in all patients, did not improve as much as the other symptoms. The author in conclusion states, that he is of the opinion that the cases of *lepra tuberculosa*, if they are not complicated by other existing diseases, can be cured by a careful administration of rattlesnake poison.

NEUROLOGY

Edited by Henry Hun, M. D.

A Study of the Tendon Reflexes in Sydenham's Chorea. (Étude des réflexes tendineux dans la chorée de Sydenham.)

M. C. ODDO. *Gazette des hopitaux civils et militaires*, 73rd year, No. 124.

Oddo calls attention to the fact that the changes in the tendon reflexes, occurring in chorea, have been studied but little. In his paper he reviews the literature, and gives the result of his observations on 147 cases. He studied these cases particularly with reference to knee jerk, which he found most easy to observe in these subjects. He calls attention to the fact that in studying the knee jerks in choreic patients, it is necessary to distinguish between choreic movements produced by striking the tendon in the usual manner and the true knee jerk. He gives a description of these choreic movements, which are distinguished from the true knee jerk by their irregularity and their similarity to other choreic movements.

The author divides the cases of chorea with reference to the knee jerks into three groups—those with normal reflexes, those with feeble or suppressed reflexes, and those with exaggerated reflexes. Of his 147 cases, bi-lateral normal reflexes were present in fourteen only. The unilateral normal reflex was observed in twenty-eight cases, seven of which were true hemi-chorea, and the other twenty-one cases, in which there was a marked preponderance of the choreic movements on one side. The normal reflex in all these instances was on the less affected or unaffected side. A diminution or suppression of the reflexes occurred in the majority of his cases, *i. e.*, in 116 out of 147. He notes a peculiar type of enfeebled reflex, which he calls the Triboulet type of reflex. He describes it as follows: "The percussion of the tendon remains often inefficacious for one or two attempts, and then all of a sudden the limb is thrown forward as if by a spring." In cases where an absence of the reflex occurred, he states that this is just as complete as it is in tabes and similar diseases. The suppression or diminution was sometimes unilateral, and sometimes bilateral. In seventy-five of his cases, he noted a unilateral diminution or suppression, and in sixteen a bilateral. An exaggeration of the reflexes was found in thirty-eight of his cases. In twenty-three it was bilateral,

and in twelve unilateral. He observed the reflex of the tendo Achillis in a certain number of cases, and found that it reacted similarly to the knee jerk, though with less intensity. The author attempts to explain the reason for these changes in chorea, and he comes to the conclusion that the entire motor system is involved in the disease, and that the changes in the reflexes are due to a disturbance of the compensating action between the cerebrum and the cerebellum.

Acute Poliomyelitis of Adults and the Relation of Poliomyelitis to Polyneuritis. (Ueber Poliomyelitis Acuta der Erwachsenen und über das Verhältniss der Poliomyelitis zur Polyneuritis.)

A. STRUMPELL and A. BARTHELMES. *Deutsche Zeitschrift für Nervenheilkunde, Vol. XVIII, December, 1900. (Erb Festschrift.)*

Fewer cases of adult poliomyelitis are reported now than formerly, as the diagnosis is more carefully determined, the earlier cases having been probably polyneuritis. The writers report the case of a man, aged thirty-two, whose lower extremities were paralyzed after a period of invasion lasting only five or six days. With the exception of a severe sweating, there were no symptoms of constitutional disturbance, and pain was limited to the lumbar nerves. Beyond this there were no sensory manifestations. During the following month the motor symptoms improved in certain groups; in the permanently affected structures there was a high degree of degenerative atrophy, with loss of electrical excitability, or the reaction of degeneration. The rapid invasion was against polyneuritis, as were the absence of peripheral pains and paræsthesiæ, which are unexceptionally to be found in neuritic affections. The lumbar pains have been described in connection with poliomyelitis of adults. The authors discuss the characteristic symptoms, such as the stationary, incurable palsy, the possibility of an exact local diagnosis, and the failure of the deep reflexes. For an exact, scientific determination of atrophic palsies, it is necessary to discriminate the fundamental principles of their ætiology and pathogenesis. The careless use of the word "poliomyelitis" for very different processes has led to much error. Upon an ætiological basis, a complete distinction between the idiopathic atrophic paralyses results in the following groups:

1. Local acute infectious inflammation of a peripheral nerve: acute local neuritis.
2. Local acute infectious inflammation in the region of the anterior horns of the spinal cord: local acute poliomyelitis of children and of adults.
3. Hæmatogenous-toxic motor nerve-degeneration: the so-called acute polyneuritis in its different forms, according to its origin and distribution.
4. Acute, sub-acute and chronic exogenous (toxic ?) degenerations of the peripheral motor neurons, including the spinal motor ganglion cells: up to this time generally designated poliomyelitis, acute and chronic.
5. Endogenous progressive atrophy of the motor neurons: neurotic and spinal progressive muscular atrophy and related conditions (amyotrophic lateral sclerosis, etc.)

*Paræsthetic Meralgia. (La Meralgie parsthésique.)*CH. DOPTER. *Gazette des hopitaux civils et militaires*, No. 35, 1901.

Dopter gives a thorough review of this subject. Roth of Moscow gave this name to a condition affecting the femoral branches of the femoro-cutaneous nerve. The branch going to the anterior and lateral parts of the thigh is alone affected. The branch going to the buttocks is never affected. The main symptoms are paræsthesia, anæsthesia, and pain. The disease begins with a localized area of numbness generally situated at the junction of the outer and middle thirds of the thigh. The numbness changes to a tingling and gradually extends to the whole area supplied by the nerve mentioned. Sometimes there are feelings of muscular tension, or pricking sensations, or a shuddering feeling. Occasionally a sensation of cold occurs. The anæsthesia is both subjective and objective. Subjectively it takes the form of a peculiar sensation as if there was something between the clothes and the skin as cotton or down. The objective anæsthesia varies in different cases. It may involve sensation, pain, electricity and heat and cold, or it may be almost absent. The pain is also both subjective and objective. The subjective pain is not usually very severe, but may be very sharp and lancinating. Objective pain may or may not be very severe. Trophic and vaso-motor disturbances of the affected area have been observed in a few cases. Pupillary inequality has also been occasionally noted. The reflexes may be slightly exaggerated. They are never abolished. The most important external causes of the disease are traumatism and cold. Various internal diseases of an infectious character, particularly syphilis and typhoid, predispose. Also alcoholism and the arthritic diathesis. Most of the cases occur between thirty and sixty and males are more frequently affected than females. The disease usually progresses slowly, but some cases recover spontaneously. Resection of the affected nerve seems to be the most successful treatment.

*Concerning Clitoris Crises. (Zur Kenntniss der Clitoriskrisen.)*KOSTER. *Münchener medicinische Wochenschrift*, 48 Jahrgang, No. 5.

The author thoroughly reviews the literature of this rare form of tabetic crisis and reports a case of his own. The condition has usually been observed in France and Italy, very rarely in Germany, and apparently not at all in the United States and England. The crises usually appear in the early stages of the disease and may precede symptoms definite enough for diagnostic purposes; at times, however, the symptom is a late one, as was the case with Köster's case. In some cases the crisis takes the form of itching, or pain in the clitoris, with a constricted feeling of the vagina; in most cases, however, there is an erection of the clitoris, with spasm of the vagina and an orgasm. This is associated, and sometimes followed by a mucoid discharge from the vulva. Usually after the orgasm there is marked pain in the clitoris and the vagina, and sometimes in the bladder and the uterus. The crises may be associated with the menstrual function, as was the case with Köster's patient. This may occur both during the day and

night, or may only take place at night time. The pains following them may last for hours. They may disappear spontaneously. No local changes in the organs have been observed.

Objective Disturbances of Sensibility in the Traumatic Neuroses. (Ueber objective Symptome der Störungen der Sensibilität bei den sogenannten traumatischen Neurosen.)

W. v. BECHTEREW. *Monatsschrift für Psychiatrie und Neurologie*, February, 1901.

The medico-legal relations of the traumatic neuroses make it especially important that all objective symptoms be carefully studied and that the physician fortify his opinion as far as possible by a consideration of symptoms which are not entirely subjective and which it is impossible for malingerers to feign. The writer has previously written upon this subject, and has also consulted other contributions, notably those of Mannkopf and Oppenheim. His studies up to the year 1895 led to the following summary of objective signs occurring in these conditions:

1. Diminution of the cutaneous reflexes on the side of the anæsthesia and increase of the same on the side of the hyperæsthesia.
2. Unequal effect upon the respiration and the action of the heart by irritation upon the anæsthetic side, and upon the side of intact sensibility.
3. The appearance of an algetic pupillary reaction by irritation of the hyperæsthetic areas.
4. Changes in the respiratory frequency and the respiration curve, and appearance of a vaso-motor reflex, consisting of a high degree of congestion of the head and face, under the same conditions.
5. The presence of a vaso-motor spasm of the skin at the areas of the anæsthesia.
6. Lowering of the peripheral body temperature upon the side of the anæsthesia.
7. Relative diminution of the vascular reaction by mechanical irritation of the anæsthetic area.
8. Appearance of reflex spasmodic contractions on irritation of the hyperæsthetic area.

9. In many cases vertigo and swinging of the body under like conditions.

In addition to these symptoms the writer now calls attention to abnormal redness, cyanotic discoloration and dermatographia. The most common locations for the hyperæmia of the skin are the face, throat, neck and upper portion of the breast. Oppenheim has reported a case in which every excitement or exertion produced a purpuric flush. In another case exophthalmos was manifested. The hyperæmia is often associated with elevation of the temperature, while the cyanosis accompanies a lowering of this. Finally v. Bechterew adds to the symptoms already noted; unequal influence upon the dilatation of the pupils from superficial irritation on symmetrical areas of the anæsthetic and non-anæsthetic halves of the body; differences between the sweat secretion upon the affected and unaffected sides; and certain associated changes in the voluntary muscles, as contractures, awkward attitudes and spastic contractions.

OPHTHALMOLOGY

Edited by C. M. Culver, M. D.

*A Case of Acute Glaucoma Induced by Cocain.*SIMEON SNELL. *Ophthalmic Review*, February, 1901.

In November, 1900, Doctor Hinshelwood reported a case of acute glaucoma due to the use of cocain. The author of the article now being abstracted, says that for nearly seventeen years cocain has been very frequently used in his practice. He had used it daily and must therefore have instilled it into thousands of eyes. The eyes so treated had never suffered in consequence of its use. In glaucoma it had been employed only as an anæsthetic at the time of operation. The day after he read the report of Hinshelwood's case a similar one came under his notice. In it there had been indefinite, premonitory symptoms of glaucoma, of which an acute outbreak was precipitated by cocain. The solution was of but one per cent. Two years before that the patient had consulted Snell with reference to an existing presbyopia, which was the only defect discoverable at that time, the vision in both eyes being good. It was in the fall of 1900 that she first noticed that the vision of her right eye was at times obscured, not enough, however, to make a lasting impression. When her medical advisor visited her the 15th of November, 1900, she complained of discomfort in the right eye, for which he prescribed a collyrium of one per cent. cocain. These drops were instilled four times. When he visited her again, the 18th, he found the tension of the globe increased and the vision considerably obscured. Four days after the prescription of cocain, he took Snell to see her. The right eye was then found to have a tension of plus two, the pupil was dilated, its cornea steamy and the vision of fingers only indistinct. The pain was considerable. The left eye had its tension somewhat increased, but its sight was little affected. As they had suspected, in advance, the nature of the case, eserine was taken when this visit was made, and this myotic solution was dropped into each eye four times during that day. In the evening the right eye was in much the same condition, the pain continuing. In the left eye the tension was increased. Iridectomy in the right eye was advised, and permitted. The operation was performed the following morning, under general anæsthesia induced by ether. Satisfactory recovery of vision resulted.

*Removal of a Portion of the Anterior Capsule in Extraction of Cataract.**(De l'arrachement d'un lambeau de la capsule antérieure au cours de l'extraction de la cataracte.)*TERSON. *Annales d'Oculistique*, October, 1900.

The procedure named by the title of this article is not a new one, nor is it considered favorably by most surgeons, because it is considered both unnecessary and dangerous. The author says that very often the capsule retracts beyond the iris at the very first touch of the cystotome, and that the actual substance of the lens is then apt to be needlessly scratched.

While several famous operators have attempted to do this removal, it is not popular, and must be done by means of extremely fine forceps especially adapted to the purpose. In cases wherein the capsule itself is opaque, it is best to remove a bit of it. Förster and de Wecker have each devised forceps to be used for this purpose and other operators have modified them somewhat, which facts indicate that the attaining of this removal is desired by some and also the difficulty of securing an instrument, for it, in all respects satisfactory. The author of this article assumes that subsequent interference with clear vision, after cataract extraction, is due to anterior capsule, hence the wisdom of removing parts of it is no longer open to discussion, and that the only remaining question is how to do it safely.

In the combined operation the procedure in question is not very difficult, nor is it especially so in the course of a simple extraction, although it is certainly not so easy as when the iridectomy has been done. The author is so much in favor of this capsule removal that he has in part abandoned the simple operation in order to facilitate the removal by the iridectomy. He makes a very narrow iridectomy. He admits that there is no advantage, as to acuteness of subsequent vision, of either the simple or the combined operation over the other. He now removes a part of the capsule whether it has sclerosed along with the lens or not, and whether the cataract be hypermature, immature, or when extracting the clear lens for the relief of myopia. The chief purpose of the removal is to prevent the complete apposition of the two layers of the capsule, anterior and posterior. The chief danger is in dislocation of the lens. Terson thinks there is not much danger of this, provided the operation include certain precautionary measures. He primarily dilates the pupil and carefully examines the surface of the capsule, by oblique illumination. If this surface is smooth, uniform, and free from markings, he may use only the fine forceps, under which it is likely to give way without any danger of dislocation of the lens. If, however, it shows markings and alterations of shading, especially in the peripheral area, it is better to make a small scratch, at the lower margin of the pupil, with the cystotome. Then the forceps can remove, without risk, a portion of the capsule. There must be no tugging or other rough handling with the forceps, since dislocation might readily be produced by such means. In the simple operation, there is a slight risk of catching the margin of the iris with the forceps. This would be done by the heel of the forceps and, in order to obviate the possibility of such an accident, the author has the forceps made so that they do not meet closely at the heel, but are there slightly separated. To the lower end of the forceps a backward curve is given, to adapt it to the posterior surface of the cornea, and thus avoid lifting the corneal flap more than is necessary. He uses both forceps and cystotome at the same time, in some cases the one slightly before the other, and, in other cases, reversing the order of their use. He claims to avoid, by this removal, the necessity for needling, later. Another advantage, which he claims for the procedure, is permitting the aqueous humor to enter freely into the sac, thus diminishing the risk of septic inflammation, since this fluid constantly washes out of the capsule any injurious substance which might collect there.

Epicanthus.

FOGGIN. *Ophthalmic Review*, January, 1901.

The author in this article reviews the literature of the subject and discusses the remedial measures adopted. While doing Sichel's operation, five years ago, it occurred to him to pass the sutures, and tie them tightly to harelip pins, one on each side, thus pinching up a fold of skin upon the bridge of a flat nose. The result of the operation of this kind, which he then performed, was neat in appearance. It seemed questionable if such an appearance could be maintained, as the eminence of tissue was lacking. Accordingly he passed a Graefe knife subcutaneously on each side of the nose, detached the tissues as freely as possible from the nose-bridge and somewhat beyond the extent of the pinched-up fold on either side, passing sutures through and tying them with the requisite degree of tightness to a short piece of leaden style on each side. The result of the first operation was not favorable, the swelling and pain being more than the seven years old patient could endure. Three years later the author did the same kind of an operation with the single difference that the style was replaced by a flat piece of lead shaped to each side of the nose, about an inch and a quarter long, tapering from five-eighths to half an inch in width, the plates being a trifle more than one-eighth of an inch in thickness. These were kept *in situ* for a fortnight, the pain and swelling being somewhat severe for four days—then gradually subsiding. The result was gratifying. The epicanthus disappeared; in place of the flat bridge, there was a more natural contour of the nose, and the central unsightly scar of the ordinary operation was, of course, avoided. There have lately been reported some cases of bone grafting, in one of which a portion of the patient's own fourth metatarsal bone was used. This has been done, however, chiefly in order to replace a necrosed vomer, where, of course, the conditions are very different from those obtaining in the class to which attention is drawn in this article.

BACTERIOLOGY AND HYGIENE

Edited by A. J. Lartigau, M. D.

The Grip-Bacillus. (*La bacille de la grippe.*)

F. RAMOND. *Le Progrès Medical*. Vol 12, No. 29.

Certain microbes, like many other things, are at first admitted enthusiastically, without opposition, then disputed, to be finally admitted as occupying a most secure position or rejected without appeal. The history of the typhoid bacillus is cited as an instance of this, and the query is if Pfeiffer's grip-bacillus is to survive, or succumb to, the discussion it is undergoing. Further investigation is necessary, to affirm or infirm its specificity. At the outset, Pfeiffer's discovery was welcomed without reserve by most bacteriologists. This microbe is found in sputum, especially in compact bits of it, situated centrally in such bits, sometimes in the liquid of grippal pleurisies, in the blood (Meunier). Its culture is most delicate. Grassberger and, later, Meunier, noticed that if some colonies of staphylococcus are added to a culture of Pfeiffer's bacillus, on bloody

gelatine, the vegetation of the grip-bacillus is thereby markedly increased, which helps to explain the gravity of secondary infections in the course of grip, as compared with the relative benignity of the pure infection from Pfeiffer's bacillus. The author gives a brief synopsis of the biology of the bacillus under consideration, and says that it at first seemed, incontestably, to be the causative agent in grip. Recently, however, some doubts have arisen, which, it is said, are to be found detailed in Rosenthal's thesis on the subject. It was Pfeiffer himself who furnished the first weapons to his antagonists. He found, in the exudates from three cases of diphtheritic broncho-pneumonia, a bacterium much resembling the one he had described as the etiologic factor in grip. He called this the pseudo-bacillus of influenza. Grassberger isolated two varieties of bacilli from the exudates of grip patients. Very recently, Elmassian found Pfeiffer's bacillus in eight cases of whooping-cough, in the expectorations of some tuberculous patients and in some cases of pneumonia; moreover, a most important objection consisted in the fact that Pfeiffer's bacillus could *not* be found in the sputa of three patients conceded to have the grip, on which accounts many authors think that the bacillus of Pfeiffer is not the real causative agent in grip, but only a very frequent cause of secondary infection.

This is all right. Let the gentlemen have their doubts. It will encourage further investigation.

G. B.

A New Procedure to Isolate Typhoid Bacilli from Water. (Procédè nouveau pour isoler le bacilli typhique des Eaux.)

L. REMY. *Annales de l'Institut Pasteur, Vol. 15, No. 3, 1901.*

Remy begins his article by stating that the current theory that the typhoid bacillus and the colon bacillus are antagonistic is an erroneous one. This view which has been held for some years is the one usually advanced to explain the difficulty in isolating the typhoid bacillus from drinking water. The author shows by growing the two organisms side by side in water, that there is a numerical increase in both for a period of ten days, after which time both gradually disappear. He points out one or two errors in the usual technique of water examinations, which lead to the overlooking of the typhoid bacillus. One of the most important of these is that the dilute carbolic acid solutions used in the Péré method have usually been just twice too strong, and another is, that when the typhoid bacillus is enfeebled, *i. e.*, after it has been in water ten days, its colonies do not appear on media for a great many days. His method is essentially a modification of the Péré method, the water being inoculated into acid carbolized gelatin directly instead of indirectly after being passed through carbolized water.

Concerning a Localization of the Influenza Process Little Noted up to Present. (Ueber eine jetzt wenig gewürdigte Lokalisation des Influenza-processes.)

LUDWIG KAMEN. *Centralblatt für Bakteriologie, Band 29, No. 8.*

Kamen states that the anginas which accompany influenza have usually been stated to be due to secondary infections. He quotes several extensive

statistical articles on non-diphtheritic angina, which show that the influenza bacillus is not considered a factor in these conditions. He then relates two cases of well-marked membranous angina in which he was able to isolate influenza bacilli together with streptococci. Both cases showed influenzal symptoms, and one was an especially well-marked case of influenza with marked cerebral symptoms. The influenza bacilli isolated from the cases were inoculated into animals without result, as were the streptococci; when the two were combined, however, death of the animals was produced and both varieties of organisms were shown post mortem to have invaded the tissues.

The Purification of Drinking Water by Boiling. (Ueber die Reinigung des Trinkwassers durch das Abkochen.)

BIZZOZERO. *Centralblatt für Bakteriologie, Erste Abteilung, Band XXIX, No. 1.*

Bizzozero states that most people object to purifying water by boiling for various reasons. He gives the most important objections as follows:

1. The water loses its air and is not so digestible.
2. The water loses its free carbonic acid gas, which normally gives it a piquant taste.
3. There is a loss of lime salts which are necessary to our nutrition.
4. Boiling gives water a specific unpleasant taste.

Bizzozero takes up these objections one at a time. He shows that the air can easily be reintroduced into water after boiling merely by shaking it for a minute or two. He shows that the amount of carbonic acid gas normally present in drinking water is entirely too small to impart any taste at all to it. The lime salts in the water are quite unnecessary as they are supplied better in other food. He claims that no specific unpleasant taste occurs if the water is boiled in clean glass or enameled ware receptacles and cooled off rapidly afterwards. He considers this the best all-round method for sterilizing drinking water.

LARYNGOLOGY AND RHINOLOGY

Edited by C. F. Theisen, M. D.

Anginas Caused by Friedländer's Bacillus. (Anginen durch den Friedländerschen Bacillus.)

EMIL MAYER. *Archiv für Laryngologie und Rhinologie, Band 11, Heft 2, 1900.*

These bacilli have been found in cases of stomatitis, ozæna, rhinoscleroma, purulent rhinitis, in the pus from antral empyema, in membranous bronchitis, in purulent dacryocystitis, and in ulcers of the cornea. They are also found in parotitis, otitis, broncho-pneumonia, meningitis, etc. The first mention of the occurrence of Friedländer's bacillus in connection with pharyngeal affections was made by Max Stoss in 1895. Five cases have been reported by Nicholle. Herbert and Nicholle found the bacillus eight

times, in cultures taken from 1,600 throats. The author gives a brief description of the five cases above mentioned. In all there were patches of membrane on the tonsils, in the majority of a pearly white color and adherent. Bacteriological examinations showed the presence of the bacillus of Friedländer. In Mayer's case, that of a young woman, aged twenty-one, a thin, adherent membrane was present on the soft palate. This had constantly recurred during eighteen months, the patient as a rule not being free from the membrane for more than two weeks at a time. Cultures were taken and examined for Klebs-Löffler bacilli, with negative results. Pieces of the membrane were also examined at the pathological department of the College of Physicians and Surgeons (N. Y.), by Dr. Lartigau. The result of the culture examinations demonstrated the presence of Friedländer's bacillus, and the micro-coccus tetragenus. The first experiments on animals were negative. A guinea pig and two squirrels were inoculated subcutaneously with one and two centimetres of a bouillon culture. In the second series of experiments, two guinea pigs were inoculated with a bouillon culture obtained from pieces of membrane taken directly from the throat. The animal that received the largest dose, five centimetres, died after nineteen days. The pathological findings were negative with the exception that the organisms were found in the spleen. The author came to the following conclusions: 1) Angina caused by Friedländer's bacillus may occur in a sub-acute or chronic form; 2) it causes no particular disturbances except, perhaps, at the time of the formation of the membrane; 3) it may occur in a membranous form, and recur from time to time; 4) in the chronic form, treatment does not do much good; the condition gets well spontaneously in time; 5) it probably occurs much more frequently than the few reported cases would indicate.

Examination of the Membrane Following Tonsillotomy and Its Relation to the Bacillus of Diphtheria. (Untersuchungen ueber den Tonsillotomiebelag und seine etwaigen Beziehungen zum Diphtheriebacillus.)

L. HARMER. *Wiener klinische Wochenschrift*, No. 38, 1900.

The author undertook to examine the membrane which is sometimes seen covering the raw surface of the tonsil after tonsillotomy. He found the membrane in thirty-one out of three hundred cases. Soon after the bleeding had ceased, he noticed small flakes on the raw surfaces, which presented the appearance of a coating after several hours. By the next day the membrane would be fully developed. The color generally was a dirty gray with small dark masses. It averaged about two millimetres thick, and was always confined to the surface of the wound. It disappeared on the fifth or sixth day. Histological and bacteriological examinations were made in all of the thirty-one cases. Some investigators have claimed that the membrane was caused by the Klebs-Löffler bacillus. No diphtheria bacilli, however, were found. In eight cases diphtheria-like bacilli were found which were proved not to be the Klebs-Löffler variety. The streptococcus pyogenes was found in every case, either alone or associated with the staphylococcus albus and aureus. The author believes the membrane

is caused by the action of the streptococcus and staphylococcus pyogenes, as they were always present in large numbers. The histological examination of the membrane showed it to be a product of inflammation, as it contained leucocytes, fibrin and necrotic areas. He thinks that tonsillotomy should not be performed on children when there is an epidemic of diphtheria, unless under the most rigid precautions.

CLINICAL PATHOLOGY

Edited by Arthur W. Elting, M. D.

Concerning the Determination of Typhoid Bacilli in the Blood of Typhoid Patients. (Ueber den Nachweis von Typhus-bacillen im Blut Typhuskranken.)

M. AUERBACH AND E. UNGER. *Deutsche medicinische Wochenschrift*, No. 49, S. 796.

Neuhaus was the first to obtain and grow typhoid bacilli from the Roseola of typhoid patients. His results were confirmed by Neufled, Curschmann, Rumpf, and others. These experiments raised the question whether the presence of Eberth's bacilli in the blood could be determined. Recently two observers have been almost constantly able to find the bacilli in the blood. Schottmüller found them forty times in fifty cases of typhoid, and Castellani obtained positive results in twelve out of fourteen cases. The authors, whose method is somewhat similar to Castellani's, were able to find the bacilli in seven out of ten cases of typhoid. Of these seven cases, there was only one that had a fatal termination, the other six being fairly mild cases. The examinations were made three times on the twelfth day of the disease, and once on the sixteenth, twenty-second, twenty-ninth and forty-second days respectively. Large quantities of ordinary bouillon culture media were used, (about 300 centimetres), and were kept in Erlenmeyer's sterile bulbs. Under aseptic precautions, blood was taken from the median vein, and from ten to thirty drops put into the bulbs, which were immediately thoroughly shaken. By this method the bacilli could be positively determined to be typhoid bacilli in about thirty-six hours. The authors claim that these observations prove this proceeding to be a positive diagnostic aid, and is not much more difficult than the Widal test or the bacteriological examination of the Roseola. In one case, in which the diagnosis was very uncertain, they were able to positively clear it up by the blood examination. A girl, eight years old, was brought to the hospital on the tenth day of her illness. The only typhoid symptoms present were the general restlessness, the coated lips, and an enlarged spleen. Morning temperature was normal, and the evening temperature did not exceed 38.5° C. Movements were of normal color and consistence. Roseola was absent, and the Widal was negative.

ALBANY MEDICAL ANNALS

Original Communications

ADDRESS*

By HOWARD VAN RENSSELAER, M. D.,

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Mr. President, Gentlemen of the Faculty, and Fellow Students :

It has been the pleasant custom for many years past, at the beginning of the college year, for the faculty, graduates and students to assemble together, for the purposes first, of greeting the old faces and welcoming the new, and then to listen to an address by a member of the faculty on some topic of common interest.

It is my privilege to-day to act as the mouthpiece of the faculty, in carrying on this custom, sanctioned by nearly three quarters of a century of use.

In the name, then, of the trustees and faculty of this institution, I bid you a most cordial welcome to the capital of the Empire State, to Union University, and, more particularly, to one of the oldest branches of the university, the Albany Medical College.

May the acquaintances which are commencing this day ripen by degrees into friendship, and mutual esteem and helpfulness, not only between the individuals of a class, or of

*Delivered at the Opening of the Seventy-first Session of the Albany Medical College, September 24, 1901.

the entire college, but also between you, as younger students, and us of the faculty, who are also students of medicine, but older and of more experience.

In delivering this opening address of the college year, I want to call your attention to two lines of thought, both connected with your work here. The first is to give you some hints and ideas on Methods of Study that I hope may be helpful to you; and then to explain some of the features in the close interrelationship which exists between the faculty and the student body.

In the undertaking of every business enterprise there is a right way of conducting it, and also a wrong way; and it is to the right way of going about your studying that I now want to direct your thoughts. The first topic under this heading upon which stress may be laid is to study on business principles.

The study of medicine which is preliminary to its practice, considered from one point of view, is a business, and should be treated strictly as such, and a student cannot attain to the first rank in his profession who does not conduct the preliminary business of study on business principles.

One of these principles is *regularity of work*. Suppose our task was to build an earthly habitation, instead of its being, as it is, that of building our temple of knowledge by study, and, instead of reporting at work regularly at eight, we sometimes got there at ten, or not until the afternoon, or, our conscience reproaching us, we arrived very early in the morning, long before working hours, we should soon be dismissed for our unbusinesslike habits; yet how many of us in conducting our business of study, when we know that we should commence work at a definite time, postpone it on one trivial excuse or another, sometimes to a later hour, sometimes till the next day, and then of a sudden try to make up for lost time by getting up early, or trying to force our tired brains late into the night. If we conduct our study in this way, the most brilliant mind is soon outstripped by the methodical plodder.

Another principle is *concentration*. In the case of the workman on the building, if he forgot his tools, and had to spend valuable time hunting for them; if he allowed his friends to

call him from his work an hour or more for conversation; if he could not remember the task that he had to do; or, if he disliked his surroundings, or finding the work distasteful, made up his mind that he would work on some other building somewhere else—this man, even if he were punctual, would not accomplish much in the course of a day.

Are not similar distractions occurring daily in our routine work of studying? So you are to concentrate your attention, then, upon the particular study that you determine upon, and let no friends nor outside influences divert your mind from the matter at hand.

The next principle is to *be methodical*. Almost all able men are methodical, and much time may be saved by living in obedience to the business principle: "A place for everything and everything in its place." Many and many a brilliant mind has failed to make its mark in the world because of this lack of method in the mental discipline. The presence or absence of thoroughness and orderly arrangement may make just the difference between success and failure.

Several years ago on reading a book which was the most popular one of the year, namely the life of Marie Bashkirtseff, the brilliant young Russian genius, I was struck by this passage from her diary: "If I had received a thorough and systematic education, I should have been a remarkable person. Everything I know I have taught myself. I have read the Greek and Latin authors, the French and English classics (contemporary writers), everything I came across, in short. But all this knowledge is in a chaotic state, notwithstanding the efforts I have made, through my natural love of harmony, to reduce it to order." So this life, brilliant with radiant promise, was a failure. The beginning was wrong, method was lacking, and everything afterwards, not being able to be properly arranged or classified, was chaotic and valueless to her.

The second general topic for consideration in studying is the *taking of notes*.

For each course of lectures, a student should have a note book, and should use it with discretion. It is astonishing and even sad to see how little an indolent student, without

a note book, will carry away from a lecture that has been well thought out and ably presented.

Most students are able to remember a subject better by taking notes upon it. This is a good practice if the notes are taken properly, and are not depended upon exclusively. The act of writing, if the mind be alert and concentrated upon the subject, intensifies the impression made upon the mind by the spoken words of the lecturer, and thus facilitates the ease of remembering. But at the same time if the notes are used as the sole means of reference, when it is desired to recall the material for recitation or examination it will be found that the subject is but imperfectly and disjointedly presented, and the memory is apt to be weakened rather than strengthened. The waste of time copying notes taken in the lecture room is sometimes appalling. When I was studying at the medical college, I have known students to spend almost the whole evening, day after day, during the entire college year, slavishly transcribing the good notes of another, under the impression that they were studying hard, and that this chirographic exercise was a certain method for the accumulation of knowledge.

Many are the students who thus exercise their fingers while their brains are wool-gathering. Copying notes, unless very judiciously done, is not study, and one may copy for hours without making the least attempt to remember, and so the process is without benefit.

In the taking of notes the rule should be to leave out all that you can. The amateur laboriously sets down everything, or tries to. It is a mistake to attempt verbatim reporting; inferences, unimportant side remarks, illustrations that are so particularly striking that they could not be forgotten, elementary facts that one has known for years—all these, together with the exact phraseology, are attempted to be written down, and then copied in the note book. Ideas and not words should be the notetaker's aim. Intellect and memory as well are strengthened more by the concentrated determination to catch the lecturer's ideas rather than to record his exact phraseology.

Nearly all lecturers, desiring to force their more important facts into the brains of the listeners repeat the ideas by

varying their expressions, in order to heighten the impression; so that the exact record of the words, apart from the influence of his oral delivery, may confuse, or at any rate unduly encumber the note book. Take notes then with judgment rather than with speed, and condense as much as possible.

When the notes are taken be sure to arrange and classify them, on writing them out, as soon as possible after the lecture, when the spoken words are still fresh in the memory. Many lazy students wait until the notes of a week or more have accumulated and then transcribe them all at a single sitting. In the mean time most of the facts have been forgotten, the abbreviated notes are often meaningless, and but little good results from the labor of transcribing.

When the notes are arranged for use, they should be preserved merely as reference to refresh the memory when the subject matter cannot otherwise be recalled; that is, the notes should be committed to memory, and then used only as a last resort for review. As you think over your notes for the first time, some word may fail to suggest a thought; if this happens go back to the original; keep this up sufficiently often, till every word or phrase in your skeleton outline has been clothed with the flesh of a vivid conception. Then your lesson is mastered.

There is a tradition in medical colleges that one has to forget his *Materia Medica* twice before he can remember it. This is of course untrue. The way to remember it or any subject, after having once learned it, is to retain it by frequent reviews from memory. Let me impress upon you that one hour spent in a careful review of any topic is of infinitely greater value than spending hours in reading and rereading the same subject from a book.

A pernicious habit that students often fall into is that of cramming. This word "cram" is a singularly apt one, and many mistake its true meaning, and believe that in cramming they are doing a meritorious act. Few, I fancy, realize that the word is, and should be, considered a word of reproach, and that the act is also reprehensible.

The word "cram" originally had reference to stuffing the stomach, and, by metaphor, is applied to stuffing the brain.

It should be considered just as vulgar and reprehensible when applied to the head as it is when one gorges and overloads the stomach.

In the process of cramming, or text-book gorging, it is just as difficult for the brain to assimilate the overabundant mental pabulum as it is for the overloaded and misused stomach to digest the food forced into it.

It is obvious that one could not eat and digest at one meal the sum total of all the usual dinners for the entire week to come; in an analogous way the same thing can be said of studying. Students often do not stop to consider that seven hours of continuous study on one topic on one day is not the exact equivalent of one hour's study daily for a week. So that frequently indolent, shiftless workers think that they can atone for prolonged periods of laziness by infrequent spasmodic spurts of intense mental strain.

What is soon won is soon lost. A few facts taken at a time, well thought out, and brought into orderly arrangement, that is well digested, may be used again, as from a storehouse, at will. Whereas masses of facts taken in all at once cannot be assimilated, they serve to confuse rather than to enlighten at the time, and are soon forgotten. One should think rather of the using and outgiving of acquired knowledge rather alone of the reception of it.

If one should ask, What should take the place of cramming? the answer would be at once patent. It is methodical study with recitations, along the lines already indicated, together with regular systematic daily review.

For the most part cramming is undertaken for the express purpose of passing an examination. Now, what are the purposes of an examination? Someone has answered that they are twofold; that they serve as reviews and as revelations. As reviews they impress the subject more forcibly upon the mind of the scholar, especially if the questions are well chosen. And as revelations they show very clearly to the student his own weaknesses. To the instructor, except that they often present the results of cramming, or, occasionally, of dishonesty, they indicate but little that he did not know before concerning the individual's scholarship.

And now to the second part of my discourse, the interrela-

tionship which exists between the faculty and the student body.

This relationship should be one of mutual helpfulness and dependence.

Students as a rule do not realize how much they could help the professors if they would, or how much the teacher is dependent upon the scholar for inspiration. They take it for granted that the instructor is there simply to help them, and so are apt to forget their own duty in the partnership which exists between them. The helpfulness should be on both sides.

Let me explain first how you students can help your professors, and at the same time indicate to you how much our best work is dependent upon you yourselves.

Perhaps I can make my meaning clearer by giving examples. Do you wish to know what your professor feels like when he discovers that his best attempts at helping his scholars is meeting with scant response? He feels like the usher who walked the entire length of the aisle in the crowded church, and motioning to the seat, turned to find that he was ushering nobody. He feels like that preacher did who made such careful preparation, and afterwards preached so eloquently, and then was told that his congregation were deaf mutes.

To bring out, then, the best in your teachers, try to be responsive and interested in each branch of your work.

When you come to the class room, know your lessons and be prepared to recite. If you do not, you waste your instructor's time, your own, and that of all your comrades. See to it that the machinery of teaching does not occupy all the instructor's time. Do not compel him to be a machine teacher. If a general, for instance, in a battle, when he wished to execute some important maneuver, should be obliged to stop and explain to the men the meaning of "charge bayonets," "right wheel," or any other such order, he would be wasting valuable time, and could not accomplish much with that army.

In the same way many a teacher has planned an interesting charge along the line for the recitation hour, and then was compelled in sorrow to spend the entire time in the manual

of arms, *i. e.*, in the elements of the work, which should have been prepared beforehand at home. To put the case briefly, no preparation by the scholar, no inspiration from the teacher.

Another point in which you can show courtesy to your professors, and be a help to them, is in promptness.

Imagine how a bride would feel, standing alone before all the congregation, waiting for the groom who sauntered in fifteen minutes late. In like manner your professor knows how deeply in love you are with his study.

Again, as to inattention and whispering. Have you ever thought how they affect the lecturer? You have all tried probably the experiment of a number of persons joining hands, and letting an electric current from a faradic battery pass through the bodies of the entire circle. What happened if any one dropped a hand? It is just what occurs when the professor sees someone whispering to his neighbor. No more electricity, no more enthusiasm.

You can easily take all the vim out of a teacher by telling him that his subject is dry and hard and that you don't like it. Please remember that every branch that is taught here is a necessary preparation for your life work, and that no matter how difficult it may be, it is for your best interest to master it. Don't you suppose that it is just as hard and dry and discouraging for the lecturer to attempt to impart knowledge on some uninteresting elementary subject to an indifferent class? Try, therefore, to appreciate the lecturer's work. The compliment I assure you will pay you good interest.

Be of cheerful mien when you come to the lecture room, and show alacrity of manner and of mind, and at least feign an interest in your work even if you have it not. What would the aforesaid bride have thought if the groom had come in with a sour, discontented expression, and a lagging reluctant step?

So it lies, then, a great deal with you students to get the best work out of your professors, for a good teacher is in part made by his scholars, as teaching is a co-operative process.

So much, then, for the relationship between the teacher and the scholar as regards the instruction. And now let me say

a few words about the relationship between the professor and the student, as man and man.

Again let me illustrate what I mean by telling a story. You may remember the story; it is of a play-actor in some little hamlet in a cowboy district out west. In this particular company of barn stormers the principal actor did not come up to the expectations of the audience, and the rough, rude bordertown population had of course little or no consideration for the feelings of the players. So they expressed their disapprobation in their characteristic ways, first by guying the actor, cat calls, etc., and then, as one act of disorder excited another, they ended by throwing superannuated eggs and vegetables at the hero. To his credit, the actor stood all these insults pretty patiently, until finally one intoxicated cowboy, getting more hilarious than the rest, drew out his pistol, and announced that he was going to make the actor dance. The latter promptly retired behind the scenes, presently he thrust out cautiously from behind the wings a great sheet of paper, transfixed upon his sword, on which was scribbled this inscription, "Don't shoot, he done his best." The audience saw at once the humor and the justice of the appeal. They had a good laugh, called the actor out, applauded him, and the act was finished without further disturbance.

Now it may happen right here in this college that some one of the teaching faculty may have some personal idiosyncrasy that may either amuse or may even be distasteful to the student, *i. e.*, he may have peculiarities that might tempt them to create a disturbance. Should this ever occur, please recall at once the story that I have just told, and recollect moreover that you are not rough, rude cowboys, but are gentlemen, with all the obligations that that name implies; and if you do feel inclined to be disorderly just imagine that there is a placard suspended above the lecturer's head, with some such inscription on it as this, "Don't misbehave, he's doing his best." Should anyone be so careless as to forget his manners, let the rest of the class, at the very inception of the disorder, prove that they are gentlemen, and also show their loyalty to their Alma Mater by seeing to it that the delinquent stops his discourteous action, and moreover that he does not repeat it.

The proper conduct that applies to the individual applies to the class equally and to the college as a whole.

Perhaps you may not realize it, but you yourselves must set the standard by which you are governed.

We call this institution a medical school, but we are in truth, as I stated at the outset of this address, a part of Union University; and I have been trying, indirectly, to impress upon you all along that you are now in a university and not in a school. The distinction that I have in mind is this: In a school you are children; you act and are governed as such: in a university, one is supposed to have cast off his childish manners, he has become a man, and should not require the children's rules and restrictions. Now, if you indulge in hazing, horse play, practical jokes, throwing snow balls, and all kinds of disorder, in the building and about the grounds, you are acting as children, and you compel the faculty to make rules restricting your conduct.

We, the faculty, wish the spirit of the university to prevail. Whether it does so rests entirely with you. You must raise the tone—we will be guided by the standard you set. The question we ask you is, shall we treat you as children, or will you behave yourselves as men? Your conduct in the future will be your answer. In the mean time, all of us being students of medicine together, we shall treat you as men and comrades.

And now in closing let me relate one more incident, and draw one more analogy from it.

There is in the city of St. Petersburg, in Russia, a cathedral, very large and imposing. The interior is rather gloomy by day, but is decorated with oriental and almost barbaric magnificence; but the effect as a whole is impressive. Once only every year an interesting and very solemn service is held in the building. The worshipers begin to congregate there just before sunset, and completely fill the great church with a compact mass of humanity. They all stand, and each person carries an unlighted candle. Gradually the light of day fades away, there is no artificial illumination in the edifice, and the soft gray of the evening shadows falls over the gilt and garish decorations, toning them down, obscuring them, and finally blotting them out of sight. And there they

stand, men, women and children, in utter darkness, motionless, silent, expectant. At last in the most eastern part of the building, the part nearest to Jerusalem, far up in the chancel, the bishop kindles his taper, and a faint glimmering light like a dim star appears in the darkness. The bishop holds his candle to that of the priest nearest to him, and he to others, and so one little spot of light after another appears about the altar. The priests in their turn light the candles of the worshipers in front, and they, turning, light those behind. The process is repeated until every one of the thousands of candles in the enormous building is adding its quota of brightness; and so the first little faint flicker of fire is gradually multiplied, and spreads in an ever widening circle, until the entire building is ablaze with light.

May I use this illustration as an analogy and compare it, metaphorically, to what has been going on here in this college. Nearly three quarters of a century ago, the man, whose picture you see here before you, where it has been placed in grateful remembrance by his successors, that it might be a perpetual source of inspiration to succeeding classes of students and teachers—this man, Dr. Alden March, kindled the first little light of medical instruction here in Albany, by establishing a school for anatomy. From this inception the Albany Medical College grew. The light that he lit was freely given to his colleagues and students, and they in turn handed it down undimmed to their successors. And so for all this period of years that light has gradually strengthened and spread in an ever widening circle of physicians all over the country, until now thousands have been lighted by its rays. This light we of the Faculty of the Albany Medical College have already received, and are now about to confide it to you, in the hope and belief that you will receive it in the same spirit in which it is given, a spirit of honesty and earnestness of purpose, and a spirit of loyalty to our Alma Mater and to its best traditions, and in the faith that you will uphold it always in truth and in sincerity and in honor.

THE FUNCTIONS OF A MEDICAL SOCIETY.*

BY ANDREW MacFARLANE, M. D.

It seems well at the opening of a new year to consider for a few moments the part a medical society should play in the life of a medical community and what influences it should exert upon the medical development of its individual members.

The original objects of this society according to its charter were "the regulation of the practice of physic and surgery within this county and the reception and collection of information on different subjects relative to medical science by medical dissertations."

The question at once arises whether this society has fulfilled to a reasonable degree the conditions for which it was organized.

The regulation of the practice of medicine has been taken away from the jurisdiction of the county societies except in so far as it refers to the general relationship of physicians to each other and to the community commonly designated by the word, ethics. Have the other objects of a medical society—the discussion of medical topics and the presentation of interesting and unusual cases received the proper consideration and attention?

During the last four years there have been each year six intervening meetings, with one exception when there were nine, and thirteen papers have on the average been presented. These papers have been written by thirty-five members, one of whom has written four, three have each presented three papers, eleven two papers, and twenty a single paper each. In these four years twenty-five per cent. of the members have written papers. The less said about the attendance the better.

If we compare this work with the work done twenty years ago by this society we appreciate what a lamentable failure we are now making. During that year there were eleven intervening meetings devoted to the reading of twenty-four papers on medical topics and to the presentation of nine

*The Vice-President's address delivered before the Medical Society of the County of Albany, October 8, 1911.

pathological specimens with subsequent reports from the committee of pathology, the chairman of which still continues to take a most active interest in the work of the society.

I desire to submit to the attention of the society stereoscopic photographs of the pathological specimens presented at those meetings. You will all, I am sure, agree that these artistic and beautiful photographs must have meant great enthusiasm and intense industry. The papers presented were short, pithy and intensely practical.

It would be a great pleasure for me to believe that our society was doing one tithe of the work done at a time which we with our boasted progress affect to despise.

Facts speak more eloquently than could any words of mine upon the truly hibernating condition of this society. What then is the cause of this dry rot? It can be accepted as axiomatic that men in this world at least, generally do those things which they believe will be of benefit to them. If they do not take an active part in the work of the society the conclusion is inevitable that they believe it is not worth the while.

The papers presented to this society have been written by a comparatively few members, oftentimes in a perfunctory way as if it was a matter of necessity to keep the old thing going. They have too often lacked the spark of vital thought and have not appreciated and met the living needs of practitioners. The members have encouraged and deserved just such dead embers by the scant courtesy of their inattention and their general lack of interest.

This society is a co-partnership and no one has a right to shirk his duty and the obligations involved. Some members are older, more able and experienced than others; they should willingly give forth of their rich treasure of experience and knowledge; others, who have had fewer opportunities, should do their part and the mere tyro can and should do something. Such enthusiastic work would be of the greatest possible value to the worker himself in teaching him habits of observation, precision, industry and thoroughness. The recent graduate could by a complete description of an interesting case and an exhaustive review of the literature on the

point at issue make any subject a most valuable training for himself and a mine of information to others. Such results however come only from work as fortunately there is no royal road to knowledge. The older members, rich in the experience of years and wise from attrition with their fellows, should not be less active. Theirs should be the additional duty to wisely but kindly criticise and to add and amply out of their abundant storehouse. Their work must not be less well done not only for the sake of the younger men who take them for guides and mentors, but also for their own sakes that they do not deteriorate and fall short of the high level which they have placed for themselves.

In my mind I carry as the type worthy of the greatest emulation the two grand old men of medicine, one in Germany, the other in our own country, who with enthusiasm unabated with age, with industry unaffected by advancing years, with human interest unquenched by the trials and tribulations of a long life still play no mean part in the active medical work of their country and the world.

It should be ever kept in mind that a medical society is a co-operative post-graduate medical school where the members are alternately teachers and scholars and always students.

As our work is the cure of disease and the relief of suffering everything that pertains to that end must be of interest. Our consideration of disease resolves itself into the recognition of the morbid processes and our endeavor to restore as far as possible the affected organs to normal. While I firmly believe in the necessity of the first for a rational and the only basis of therapy, I think the question of method and manner of treatment has been too much neglected and is too often considered of trifling importance. It should be constantly kept in mind that the patient comes to us for treatment and not for fine spun theories. The derivation of the word physician from φύσις "nature" "natural powers" and not from φῦσα a bellows gives us at once the cue.

We all appreciate that for almost all the self-limited diseases, no drug administration is required. The physician in these cases should stand as a sentinel under arms ever ready to meet and checkmate any unusual move of disease. In chronic disease, however, the conditions are very different

and for that reason they have become the *bete noir* of our science. It is in this field that the quacks of all descriptions, oftentimes to the discredit of true medicine, ply their arts and for a time flourish. The physician who places his trust upon drugs alone in these cases, too often does his patient more harm than good or himself recognizing the futility of this method of treatment, loses faith in therapy and by his lack of self confidence induces distrust and apathy in his patient.

If we should read a list of drugs sold by a first-class pharmacy and prescribed by the best practitioners we would be dumbfounded by the confession of our therapeutic weakness as displayed in the polyglot Latin and Greek terminologies of our mushroom therapeutics.

Fortunately medicine has advanced not alone along one line. Therapeutics too has received its share of attention and to-day much can be done to mitigate pain and relieve suffering by agencies which do not consist simply in the administration of drugs.

The Fraenkel treatment of locomotor ataxia, the Nauheim and Schott methods in the care of cardiac cases, the careful regulation of the diet in gastro-intestinal disorders, the employment of massage, electricity and the Zander movements and the application of hydro-therapy for a multitude of human ills indicate the lines along which I believe the successful practitioner must travel.

It should be part of the educational work of a medical society to bring these methods to the intimate knowledge of its members.

No year's work should be deemed complete without one or two demonstrations on patients of some of these methods by one who should be engaged by the society and properly compensated. Such demonstrations should be made so thoroughly practical that the members of the society could at once grasp the indications for and the manner of their application.

We all know how the artist tries to put a touch of life, no matter how insignificant, in his pictures and how the greatest pictures give us a simple, truthful depiction of life. Still life, no matter how skillfully drawn, beautifully grouped and

truthfully tinted, never appeals to us in just the same intense way. So I have often felt about a medical meeting. The dry narration of papers too often becomes tedious and "*langweilig*," but introduce the human and the atmosphere clears at once, we are immediately aroused from our semi-comatose condition.

It would require no great effort upon the part of our members to demonstrate at least one instructive case at each meeting and the result, I believe, would be most gratifying.

The consideration of the other object of a medical society—the relation of the physician to the community and especially to that great medium by which the community is reached—the press, I approach with fear and trembling but with a deep conviction that something must be done. I know I am travelling upon quicksands and I fear I may be of that class who rush in where angels fear to tread. It must be accepted that to-day with the omniverous newspaper reader and the irrepressible news gatherer it is impossible to shut out entirely from the non-medical world what is going on in our domain. It is doubtful, if it would be well, even if it were possible. One of the severe criticisms against our profession from the laity is its secretiveness; that it does not educate the people to appreciate its work so that they can themselves recognize the difference between scientific methods and quackery. It is also true that the physician should be a citizen as well as medical adviser and should not hesitate to insist that upon matters affecting the public health at least his advice should be paramount.

These, however, are not the things I have in mind. It is the narration of personal deeds and of diseased conditions of patients which appears both vainglorious to the individual and highly discreditable to the profession. A prominent judge has said "Such publications for no purpose of public instruction and only for private gratification or laudation deserve severe censure."

I appreciate the fact that some of these things may be done unwittingly or without our knowledge, but too often, alas, the ear marks are so plain as to make their point of origin evident. I myself must plead guilty. Some years

ago I was induced to give my views to a reporter on neurasthenia and was rewarded the following Sunday by seeing the word "distinguished" before my name. I now feel that the prefix of the adjective should have been changed. A few weeks ago I was astounded upon reading a personal in an evening paper that a patient of mine was rapidly recovering under my skillful care. Such notices are of course unavoidable and may unfortunately happen to any one of us. How to distinguish these from those which are objectionable must of course be left to the innate sense of each one.

The remedy I believe would be simple and eminently satisfactory both for the public and the profession. The president of this society should appoint a representative committee upon the Press and to this committee should be referred for answer all medical questions upon which the public is interested. Such impersonal statements would necessarily have great weight as they would represent the opinion of the entire medical profession.

For private professional advertisements a bulletin board could be placed in Alumni Hall and thereon could be posted all newspaper notices to remain one year or the secretary, at the semi-annual and annual meetings, could read all such notices and they could be incorporated in the permanent transactions of the society.

It is surely eminently wise in our profession where apparently of necessity there are so many heart-burnings and so much disappointment over what may seem the unequal rewards for services, that we should do away as far as possible with all possible causes of dissatisfaction and jealousy.

When I think of our situation and the splendid medical advantages offered here in hospitals and laboratories I feel that this city of ours should play no mean part in medical science. Greatness does not consist in size or in numbers but in work well done. If the true medical spirit actuates us the rest will be easy. This society with its glorious career of almost a century must be no laggard in the advance of modern medicine.

SELECTED TOPICS IN OBSTETRICS.*

By GEORGE M. McCOMBS, M. D.,

Frankfort, N. Y.

Mr. President and Members:

The subject of obstetrics, or one of its many parts, is an accompaniment of almost every well-arranged medical meeting. The reason is plain—all or nearly all are directly interested in this field of work. I shall not, therefore, offer an excuse for bringing this hackneyed topic to your notice. The practice of obstetrics, in a sense, is paradoxical, even more so than is the practice of surgery. The paradox is in this: We are all educated in surgery, but only a few are accorded surgeons and but few practice it. On the other hand but few are educated in obstetrics, and nearly all practice in this field. Nearly every doctor will assume the care of the obstetric case, and will bravely meet his first case of eclampsia, or *placenta previa*, doing the best he can. And this same doctor, perhaps, would not for money, or other consideration, open a pus tube, or remove a diseased ovary, if he had the opportunity. The general practitioner must practice obstetrics. In fact, it is a large part of the work of many of us whose surgical practice has been side-tracked by "specialism."

The obstetric surgeon, however, is being evolved from our ranks, for some become better qualified than others and naturally better adapted to this line of work.

No man is altogether qualified to practice obstetrics who is not also a surgeon. He must have the knowledge, the instincts, the aseptic sense and the technique of the surgeon, too, in every case that deviates from the normal; in other words, if his services are worth anything in some cases, it is from a surgical standpoint, rather than from the standpoint of the physician. On the part of the patient, the physician who is to assume the responsibility of the lying-in chamber ought to receive the consideration due the surgeon, who is to do an important abdominal operation, for, indeed, he may have to do an important operation on short notice.

*Read at the quarterly meeting of the Herkimer County Medical Society, Little Falls, N. Y., September 3, 1901.

We ought not for this reason allow ourselves to be pressed into obstetric service on short notice. I suppose I speak the experience of others as well as myself when I say that only a few cases, comparatively, are placed in our care early in pregnancy, to be looked after as they should be. It is nonsense to talk about prophylactic measures in a case about which you have only time to learn that you are wanted, and wanted mighty quick, too. We can imagine, of course, a condition of prophylaxis to which the physician might be a party that would revolutionize the conditions of life itself. This Utopian result would have taken up the question of the skillful adaptation of one family or "strain of blood" to that of another—the mating of the sexes in accord with laws governing the reproduction of all that is best and most perfect in animal life, consequently eliminating therefrom defective physical types, diseased tendencies and imperfect conditions generally. With no attempt in this direction, not even asking advice along these lines, we are still far from our ideals of what ought to be. We have simply to accept conditions as they are and go prepared for "the worst."

When, as often happens, the large brainy six-footer unites his fortunes with the little stunted schoolhouse specimen of womanhood, we need not expect the condition of child-birth, if it occurs, to be anything else than abnormal; but if such cases are seen early enough we may elect a course that will best conserve the welfare of mother and child. The deformed pelvis, especially the shortened conjugate diameter, is very common, amounting to thirteen per cent., as determined by 1,000 measurements at the Johns Hopkins Hospital, and it is my opinion that others like myself have overlooked this element in many of our cases of "tedious labor," so-called. This condition we ought to discover as early as two months before the expected natural delivery, so that we may elect a course of safety. Probably a few women will not consent to be measured, but by far the majority will not object and will regard the suggestion as an indication of what they need a physician for. To measure a woman and to look out for her interests in this direction is not the *only* reason for getting early control of the case. Attention to the general health, such as prevention of constipation, the proper treatment of anæmia when it exists, as it frequently does, advice as to exercise and to other hygienic rules,

in this way putting the woman in the best possible condition to withstand the inroads upon her vitality which the growth and development of her child is sure to make upon her. Away with that old saying: "A sick pregnancy is always a safe one." It is generally exactly the opposite. Whatever builds up and makes the woman strong is a large factor in her safe transit through the lying-in period; her blood, if rich, has greater germicidal properties and is preventive of sepsis; it also favors the subsequent restoration of the uterus to normal conditions, a very important matter to the woman in question. It should be the duty of the physician to watch the pregnant woman closely for the danger signals, the toxæmia or uræmia, connected with the excreting powers of her kidneys. Our attention is often too late and we first see our case when in convulsions. It is now quite generally conceded that with proper preliminary care we can prevent this frightful result of faulty elimination of the poisonous products, and if that is true, no other reason for the early care of the case need be mentioned. It is to be remembered that the time honored albumen test is not sufficient. It is only an indicator at best. The fact is we have all placed too much reliance upon the simple examination of the urine for albumen, concluding if none was found, or only a trace, that the case was in *no* danger, or if considerable amount was found that the case was in great danger. This theory has been pretty well set aside by those who have had the most experience in obstetric work. It is the urea, or some of its derivatives or compounds, which kill the woman, and, briefly, it is the quantitative test for urea that needs to be made. Far below the normal amount of urea means danger, albumen or not. A recent writer reports ten cases seen in consultation, all of which proved fatal, and not one of them showed a particle of albumen in the urine. I want to emphasize this because I have myself many times felt a sense of security in these cases depending upon the albumen test even in the presence of symptoms that I now know to have been due to the toxic substances overlooked. Again, the urine is not always diminished in amount to the extent of causing anxiety, but the urea may be diminished in these cases, dangerously so, too, as the test may show.

Another matter of importance in the way of prevention of trouble at the lying-in period is that pertaining to the help or

nurse that the woman is to have with her before, at, and during her confinement. As we know, we are not frequently consulted about this, especially among people of the middle or poorer classes, who are the vast majority of the child-bearing women. They make but little calculation in this respect. Such help as can be obtained cheaply or donated by some relative is the rule. This arrangement compels us to divide responsibility with any and every one, regardless of the intelligence or lack of it in the woman employed. I have had such a woman throw away my prescriptions and substitute something of her own, many-a-time, and have had her assume responsibility little less than criminal. Some months ago, for instance, I was called to see a case about which I had great anxiety because of a profuse hemorrhage that occurred some time before. When I hurriedly arrived at the house the "nurse" told me that there was no hurry as she had made an examination and "the head was still high." And *these* are the women who "help" us. How often this kind of help takes it upon herself to make a vaginal examination of the parturient woman, I cannot say, but I believe that it is done with sufficient frequency to send a shiver over one's aseptic sense. What is to hinder such an examination by the old crone who professes skill as a midwife as she does? We can imagine what has happened if after our elaborate methods of hand-cleaning and other methods of prevention we have sepsis follow in our wake. I have so much fear from these meddling women that it is my habit whenever I have the opportunity to caution my expected patient as to any such examination. It is a fair inference that some of the obscure cases of infection are from the fingers of this obliging woman friend, instead of being due to the doctor's carelessness, as so often reported by the friends when unsatisfactory results follow the birth. She not only thinks that she can assist wonderfully when needed, but also that she can prepare the way for a delightful birth by some cathartic that will deluge the bed at the most inopportune moment with fecal matter or "help" in some other equally beneficial way. Again she tries to "assist" in choosing the attendant. The doctor who has complimented her on her skill sometime, or, what is more probable, shut his eyes to her ignorance, is the one she aims to have present, and she materially injures the chances of the woman who is hoping to go safely through her trouble by thus weakening

confidence in the one to whom she must intrust her welfare, and possibly the most competent to be had.

As to the management of a normal birth perhaps I need say nothing. Perhaps there is no way that may be said to be *the* way, for our ways of doing the same thing are many and all equally good, provided always that rigid aseptic precautions be maintained. How it can be done with this "help" to which I have before alluded is a problem for each to solve. I contend that it must shut out very many of the *kind* offices usually proffered, all handling, injecting, anointing, and, in fact, every thing that by any possibility can infect our patient. As for myself, I am in the habit of making myself just as clean as I would try to be if I knew I would have to open the abdomen before I was through. With thirteen per cent. of all cases abnormal in the bony structure, together with the complications that may otherwise arise, I deem it prudent to be extremely careful in the matter of cleanliness, especially of my hands. In the preparation of the woman there is much that can be left to the trained nurse, but not to the "help." When "help" only is available we must have our eyes upon everything from start to finish. It is a common custom to have the woman sick in her most dirty clothing and to place under her hips dirty pieces of bed-clothing to catch the discharges. It is needless to say that this is all wrong. The woman, her clothing, the bed, all should be clean. I always carry in my obstetric satchel a clean, surgeon's apron, which I put on after I have washed. I use this for the double purpose of protecting the patient from my clothing, and my clothing from the discharges. I do not attempt to make my diagnosis by external examination. I do not believe it to be good common sense to do so. The position of the child can be outlined of course, but other conditions necessary to know we must find out by internal examination. I do not believe generally in the use of gloves, although I always have a pair with me for use in case my hands are not in condition, as, for instance, after an autopsy. For cleansing my hands I rely largely upon soap and water with thorough brushing. I dip my hands into a bichloride solution after this and, quite frequently, use alcohol, which I believe one of our best antiseptic remedies, and, besides, it keeps the hands in good shape. I never use vaseline, because as found in the homes it is germ-laden, and with me the cheaper varieties

blunt the sense of touch. Lysol in water makes an excellent lubricant if one feels its need. At my first examination I aim to be thorough and then *I do not frequently repeat it*. It is a common experience that a woman believes herself somewhat neglected at this time if the physician does not have his finger into her vagina frequently "to help her," as she says, and sometimes it is hard to resist her importunities "to help." This should be explained to the woman as against our present ideas and a custom alike senseless and dangerous, belonging to the "handed down" customs from that time not so long ago, either, when sepsis, in a mild form at least, was very frequent, and undoubtedly the finger in the vagina played an important part in the tragedy.

I seldom insist upon any particular position in the early stages of labor, believing that nature indicates better than I know that which is best. I believe that the woman can best deliver herself in the "squatting" position which one will see assumed so often by the Italians and other foreign women. I prefer the left lateral position for examination and for ordinary birth. The reach of the finger is more and the control of the exit is greater both for retarding in threatened ruptures of the soft parts and in expressing the head when desired. I usually give ergot as the head is born or soon after. I always give the placenta *time* and whether it is due to the *time* which I give, say one-half hour, if required, or whether it has been due to the good fortune which has befallen me I cannot say, but at any rate I have only had two cases in which I have had to go into the uterus with my hand for the placenta in more than one thousand cases. That adhering placenta occurs *after* I do not believe, but fear that some do so believe. As to anæsthetics in labor I favor them with the same precaution as in other cases. There is nothing about the woman's condition at this time to make anæsthetics *less* dangerous. The writer in *Gould's Year-Book for 1901* has it right when he says in effect: "Only those who can appreciate the danger of anæsthetics should use them." For several years I used chloroform in almost every case, then I nearly had a death and became more cautious. I am now using chloroform in suitable cases, the smallest amount that will destroy the cutting character of the pain, and hardly ever, even in forceps cases, do I carry it to surgical anæsthesia. There are surely some undesirable effects from chloroform. I have no

doubt as to a greater liability to hemorrhage, and digestion is always impaired by any considerable amount used. After the birth, unless a trained nurse is present, I look personally to the cleaning up of the patient and bed, and I always apply a nicely fitting abdominal binder. As to that class of cases, abnormal in some way or delayed, the forceps cases, these will be more and more common as one appreciates more and more the undesirable features of a prolonged labor. It has been my practice to use forceps early. I mean by that *early* in that stage of any case wherein I clearly observe that no decided progress is being made and the woman's strength is on the decline.

I do not believe the danger to the child nearly so great from the forceps skillfully applied as from the forces of nature too long continued upon the impacted and unprotected foetus. When for any reason I have been over-persuaded by the friends to wait a little longer, I have decided hereafter to use my own judgment, as I have usually in such cases had such a work of resuscitation as to convince me that the waiting was the cause of it. I usually use the Elliott forceps and carry with me the axis-traction rods, which will convert it into the axis-traction forceps if thought best. The opinion abroad I observe is that all forceps deliveries should be with the axis-traction instrument. With the woman on a table, so placed that the handles can be properly depressed, much of the advantages of the axis-traction instrument can be secured with any good forceps, and in that large class of cases where there is a shortened conjugate diameter, if the woman be made to assume the so-called Walcher position, so as to increase this diameter (made with feet hanging over the end of the table almost touching the floor), a great gain in the ease in which the delivery can be accomplished will be apparent. In this position and with the axis-traction instrument, full term delivery has been accomplished with a conjugate diameter of two and three-fourths inches. In all cases the forceps should be used with great care not to injure the soft parts. I have used the forceps many times without an anæsthetic, but prefer not to do so. I have not found that the forceps, if correctly used, add to the danger of laceration—in fact, I believe the danger less, because we can better control the exit. Should a laceration occur in any case, I repair at once. With the finger in the rectum, rolling out the tissues, well into view,

I repair the tear. I use silkworm gut or silk rather than catgut, which absorbs too quickly.

Two important complications, an eclampsia and hemorrhage, the former, as we know, is best treated by methods of prevention; but as that is not always our privilege, we may expect to see a few cases of this dreadful trouble.

I am greatly attached to the treatment by blood-letting. I have used it before, during and after the birth, and have only words of praise in its favor. It is useless to wait as regards emptying the uterus. After seven months, I have rapidly dilated, under chloroform, applied forceps and had a living child, which may be understood as quite unlikely to occur after many convulsions have occurred. The free use of the lancet in these cases will give better results than any known drug, regardless of what any book may say. The use of the saline solution will be of great advantage. Hemorrhage that we fear most is connected with *placenta previa*. There is no set rule for treatment. I should probably pack until ready to operate quickly—then dilate and by version or forceps complete the birth. Post-partum hemorrhage is also serious and must be treated correctly and quickly. While the lemons or vinegar are being hunted up the woman may die. Drugs are all too slow, though they may supplement other means. Compression of the abdominal aorta I found a good, quick treatment in one case. Thoroughly packing with gauze is the correct thing. These cases almost always, it seems to me, come *when we go unprepared*. One is not apt to find dangerous germs on a freshly laundered sheet, and from *this* source I once obtained quickly some reliable packing, and I think saved the life of my patient.

In all my cases after the birth and the woman is made clean, I use a small damp bichloride compress over the vulva, covered by the regular napkin, which is to be freshly laundered. I have this changed every two hours, and in the absence of a trained nurse, I have the mother herself make the application to her person. I use these antiseptic compresses, not for *mental* effect, but because it has been shown that at or near the entrance to the vagina is the abode of germ life poisonous to the woman. I do not allow the douche to be used because I do not want to wash away the natural secretions. It has been proven that these secretions are more powerfully germicidal than anything that could

be safely injected. The fear of septic fever is ever before us, and to some extent probably ever will be.

I believe, however, if the woman is left germ free, so to speak, that she will remain so, unless infected by the meddlesome opening of this naturally closed passage—the vagina. The woman may have old inflammatory trouble, which may be rekindled by the birth process into fatal activity, and it is not fair, then, to assume that her death was due to the doctor's lack of aseptic precaution. I have been able in two cases, where fever developed later, to trace the cause to the too ardent advances of the husband, and it is quite possible that this is an overlooked cause in some cases. There is no specific puerperal fever, as once taught, but a variety of *diseases*, each due to a specific germ infection. Our prognosis depends upon this fact. Streptococcus infection is always serious, if not fatal. Accepting the views of many good observers that the secretions are powerfully germicidal, these germs of infection can only multiply upon injured surfaces, and it is this fact that makes the traumatism of labor so important. Knowing that the gravity of a case depends upon the form of infection, it would be most desirable to determine by specimen and culture what we have. It is true that this is like locking the barn after the horse is stolen, for once infection has occurred, it becomes a "battle royal" between the tissues of the woman and that which tends to destroy her. We have seen that douches are surgically wrong. Even more so is curettement. The curette used in the presence of the streptococcus infection is absolutely contra-indicated, opening up as it does new avenues of infection. To limit infection and prevent germ multiplication is, or should be, our aim. "Dryness is an enemy of bacteria," while heat and moisture favor multiplication and growth. So far as local treatment can cut short a process that has already begun, I am convinced that the "dry treatment," so-called, is best. This treatment has been ably advocated by Miller, of Syracuse, and practically the same idea has been taught by Carl Beck in his clinics for years, *i. e.*, "Dryness is an enemy of bacteria." I have had an experience in one case only that I believe to have been a most virulent infection, and this woman recovered promptly. The method is this: In a case of sepsis where the temptation is to *do something radical*, simply wipe out the uterus and pack with dry sterile gauze, repeat-

ing the process every eight to twelve hours. General supporting treatment, of course, to counteract the depression of the infection is always indicated. I have but little faith in specific medication.

The prevailing custom as to the after care of the lying-in woman by the attending physician, in the light of modern ideas and known conditions, is simply an *abominable* one. There are a few people who know enough to allow the doctor to use his own judgment as to when his visits to the case shall cease, but by far the vast majority of people have imbibed from the doctors of thirty or forty years ago the idea that when the baby is born and one complimentary visit made, that the job is complete, and "if anything happens the doctor is to be sent for." In the light, I say, of known conditions, it is strange if something does not happen, and a safe transit to the mother and child through the two weeks following the birth would be greatly increased by a regular daily attendance, and instead of our winking at and endorsing an obsolete method, we really ought to censure any medical man who abruptly leaves the lying-in mother to shift for herself for that long time between the next day after birth and the time she is able to come to the office. The presence in the home of a trained nurse is no excuse either, unless it is conceded that she knows more of such a case than the attendant.

There are a few other matters that I will refer to. When the woman gets upon her feet, I regard the abdominal bandage with a T bandage and pad support to the vulva of considerable importance to women who have work to do. In the 1900 volume of the *Transactions of the New York State Medical Society*, Dr. Edgar, in his article "Prophylaxis in Gynecology," advocates this form of bandage. I have used it, however, for years, and can speak knowingly of its value. I also give the patient small doses of strychnia for two or three weeks for its effect as a muscle tonic. Castor oil I do not prescribe, but if a woman prefers this dose, I do not object. If an anæsthetic has been used, small doses of Rochelle salt or part of a seidlitz powder every two hours will act well. I prefer to have the bowels move the second day. It is usually proper to put the woman on the chamber to pass her urine. Unless danger from hemorrhage, it is best to do so, as clots are removed and one source of trouble avoided. After-pain is often a troublesome symptom. It is prevented by getting firm

contraction and care as to passing of clots. After a severe birth I often give a small dose of morphia hypodermatically, and for the tedious after-pains I have found dionin, one-twelfth grain, to be a very excellent remedy, given every two hours as needed. As to the management of cases requiring version and operative interference necessary in extreme cases, I shall not attempt to discuss. I will merely say that important operative procedures ought to be well thought out and undertaken only in the presence of plenty of help, if possible to secure it. It is never certain, though, that time will allow this and, as before indicated, any man may have to choose between a severe operation or letting his case die undelivered, and I believe he ought to elect the former course. A few words relative to the baby and I am through. The woman present is supposed to take charge of and properly care for the baby, but in this, as in her care of the mother, she is usually deficient. For a doctor to intimate that he knows more, as to what ought to be done for the baby, is equivalent to a declaration of war. Some excellent physicians take it upon themselves to wash the baby, no doubt believing it to be the easy way out, all things considered. I never do more than to suggest as to the bath, but I always dress the cord myself. I do this by cutting the cord short, wrapping it in sterile gauze, then applying a four-inch gauze bandage several times around the abdomen to take the place of the little binder, which is usually prepared. What I have gained, or expect to gain by this, is to avoid that meddling—greasing, etc.,—which is usually done by the aforesaid woman. I try to have this bandage left one week. If the doctor really thinks he must wash the baby, I suggest he learn the lesson from the Italian women, who do the work with neatness and dispatch in an all-over bath. Many babies are injured by the prolonged bath and exposure incident thereto, and it would in many cases be much better to defer the bath for several hours. As to feeding the baby—which so many women seem possessed to do at once—I favor albumen water. It will satisfy the needs of the baby and relieve the anxiety of the woman in charge. Perfect rest of the little one and absence of dosing we ought to secure if possible.

If there is a misused being in this world it is the helpless baby, and many of us, with the old woman to whom I have paid my respects in this desultory paper, could say in the language of

another: "We have left *undone* the things we ought to have done, and *done* the things we ought not to have done," and I may add, there is no health in *it*.

FOR THE ANNALS.

WHY GO TO A SANITARIUM?

BY W. F. ROBINSON, M. D.

A question which sanitarium physicians are frequently asked is the following: What possible reason is there for me to go to a sanitarium? You tell me you will give me baths, electricity, massage, etc. My own doctor has a battery and is thought to be quite skillful in using it. I have a splendid rubber who comes every night and gives me massage, and there is a fine bath house in the next street where I can get any kind of bath I need. Why then should I leave my home and my own doctor in whom I have every confidence and go among strangers?

This question which seems hard is really very simple. There is a certain large class of cases marked by a lack of nerve force that have no tendency to get well as long as they remain at home, no matter how good a doctor they may happen to have. They worry along, month after month, sometimes better, sometimes worse, until they finally fall into the ranks of chronic invalids, there to spend the rest of their lives, a misery to themselves and a nuisance to those around them. On the other hand if these cases go to a good sanitarium they are very apt to be cured and later to be able to return to a life of usefulness. These facts are becoming recognized more and more by the profession at large and as a result the number of sanitariums is constantly on the increase. This is not due to the fact that general practitioners are not skillful and faithful, or because there is any magical system of charming away disease known only to those who keep sanitariums. It is on the contrary due to facts not well known to the public, but very clearly understood by those who have carefully studied the subject. It is these facts that the writer would like to consider briefly in the present article.

First, they may be embodied more or less completely in the following general statement:

At home these cases are treated under the most unfavora-

ble circumstances possible, while at a well managed institution the conditions are all favorable. One of these unfavorable conditions is that the cause or causes which brought on the disease are still acting and are almost certain to counteract any efforts made to cure.

Take for example one of our modern women, worn out by a combination of household cares and society duties. Is it not perfectly evident that these cares and duties will continue to harass her just as long as she remains in her own home? She may be surrounded by the care of a loving family and attended by a most devoted and skillful doctor, but all the same her worries and duties will be pulling her down in spite of everything that can be done to prevent it. The very sympathy with which she is surrounded is often an important element in keeping her back, for very few people know how to manage a nervous invalid. They either sympathize too much, which tends to fix the patient in her invalid ways, or they do not acknowledge that she is sick and scold her for shamming.

Another thing is the difficulty that the busy doctor has in grasping these nervous cases and directing their treatment. He may be able to diagnose a diseased lung with absolute certainty and he is perhaps abreast of the very latest methods of treating typhoid fever, but what will this avail him when in his busy morning rounds he comes to a patient who has no fever, whose pulse is normal and heart regular. He can find no objective sign of disease and yet he or she has a long train of symptoms that seem to him of little importance compared to the typhoid case he has just left or to the child in the throes of diphtheria to whom he is hurrying.

It is no shame to the general practitioner that he gives these cases scant attention and he can hardly be blamed if he does not look on them as very important compared to his cases of organic disease. Even if he does take the time to listen to the long story of a nervous patient's woes, he is not in a position to look after the patient's manner of life and occupation and if he did lay down rules to guide her he could never know if they were followed or not.

Contrast this now with conditions that exist in a first-class institution for the treatment of nervous diseases. They are

generally located in the country in the midst of beautiful scenery. They have nothing about them to suggest the hospital except the nurses moving quietly about in their spotless caps and aprons. The house gives one the impression of a beautiful summer home, borne out by well kept lawns and walks with perhaps a distant view of a green house. The patient is first examined by a specialist who has made the treatment of nervous disease his life study. Local disease of any kind is sought for as in any medical examination, but in addition the patient's past history, habits of life and temperament are looked into so as to obtain all possible light on the nervous condition. Local diseases if found, such as pelvic trouble, indigestion, etc., are treated as they would be anywhere, but in addition the treatment is arranged so as to meet the special needs of the nervous system, and it is just here that the advantage of a sanitarium lies.

Just as there are all kinds of disturbances of the nervous system so the treatment admits of almost infinite variation. Some patients are excited so that they are in a state of chronic exhaustion from mental and physical activity. These patients are made to rest a great deal while the irritable nerves are soothed by appropriate treatment. Other patients are indolent and apathetic with feeble muscles and sluggish circulations. These are encouraged to take more exercise and to enter into the various amusements that form an important feature of sanitarium life. A certain class of patients are kept back by a morbid fear of doing things, so that they never get any proper exercise or recreation. A common symptom of nervous trouble is a loss of interest in life and everything that it holds.

These are only a few examples of the numerous forms under which nervous troubles appear and all these cases have to be dealt with according to their various needs. The aim of the treatment which includes the whole life of the institution is to build the patients up, to establish natural sleep and normal habits of thought, to do away with morbid ideas and to get patients away from reliance on drugs of any kind. In short every effort is made to bring the patient into a normal condition physically, mentally and morally; or, in other words, to establish a proper relationship between the intellect,

the emotions and the will. If this is accomplished it will be found that the indicated treatment, whatever it may be, which was useless at home, will often act like a charm and a patient that has refused to improve at home will rapidly gain under intelligent sanitarium care and go on to an early recovery.

Editorial

"As to the animal magnetism, so much talked of, I must doubt its existence till I can see or feel some effect of it. None of the cures said to be performed by it have fallen under my observation, and there are so many disorders which cure themselves, and such a disposition in mankind to deceive themselves and one another on these occasions, and living long, has given me so frequent opportunities of seeing certain remedies cried up as curing everything, and yet soon after totally laid aside as useless, I cannot but fear that the expectation of great advantage from this new method of treating diseases will prove a delusion. That delusion may, however, and in some cases, be of use while it lasts. There are in every great, rich city, a number of persons who are never in health, because they are fond of medicines, and always taking them, whereby they derange the natural functions, and hurt their constitution. If these people can be persuaded to forbear their drugs, in expectation of being cured by only the physician's finger, or an iron rod pointing at them, they may possibly find good effects, though they mistake the cause."

BENJAMIN FRANKLIN.

The Life of Benjamin Franklin.

By Jared Sparks.

P. 504.

The Medical Society of the State of New York From every standpoint it may be said truthfully that the semi-annual meeting in New York was a thoroughly scientific meeting. The programme was well-arranged, there was an abundance of material of great interest to the profession-at-large, and the attendance was excellent and characterized by a cordial spirit. The discussions were clean-cut and to the point. The attendance was largest on the afternoon of Tuesday, when Dr. Mann presented an abstract of the report on the operation and autopsy in the case of President McKinley. Dr. Mann was peculiarly impressive in his remarks, and one could not fail to observe the earnestness with which he evidently had felt the responsibility of the

case, the honesty which was evinced in the bulletins issued from time to time by his associates and himself, and their candor in regard to the autopsy.

The discussion on Tuesday evening, on gall-bladder surgery, was interesting and instructive.

Dr. Kelly, of Baltimore, presented a very interesting paper on "The Method of Incising, Searching and Suturing the Kidney for Stone." Like so much of his work it presented a great deal of careful thought and much originality. The papers by Drs. Macdonald, Curtis, Shaw, Vander Veer and Elting of this city were valuable contributions. Invitations were received from the Post-Graduate Medical School and Hospital, and the Polyclinic to attend the clinics and see the work of these institutions.

The luncheon given by the president brought together many of the ex-officers of the society and was a pleasant opportunity for meeting and conferring on medical subjects and conditions of interest to the society. The reception given to members and guests by the Medical Society of the County of New York, was a great success. There was certainly in this semi-annual meeting no intimation of medicopolitics. The result will be to strengthen the belief that it would be a wise thing to repeat these scientific gatherings, holding them in the various cities of the state.

**The
Decadence
of a Medical
Society**

At the semi-annual meeting of the Medical Society of the County of Albany, on October 8th, which, according to the law of the Society, is set apart for an address by the Vice-President, a rather unusual course was taken in criticism and comment upon the character of the work done by the Society. Dr. MacFarlane directed attention to the gradual decrease in attendance and in scientific contributions during the past twenty years, fortifying his remarks by statistics, and by the presentation of a series of beautifully finished colored stereoscopic views of pathological specimens which are a part of the archives of the Society, and a memorial of the industry of a generation now passed away.

The discussion which followed the reading of the Vice-President's address elicited some instructive opinions. It

was led by Drs. Curtis, VanderVeer and Ward. All deplored the palpable fact of decadence in interest and enthusiasm, and all spoke with the prestige of years of active service. Dr. Curtis has been an especially enthusiastic and active society member. During the period of his most energetic work the ALBANY MEDICAL ANNALS was founded as the organ of the Society, and under his editorial supervision the transactions of past meetings were printed and collected as a permanent historical record. An investigation of the ALBANY MEDICAL ANNALS, both as to appearance and literary merit during his incumbency, reveals a high standard, which his successors, though inspired by the ambition and energy of youth, have striven hard to emulate. As Secretary of the State society for years he was well qualified to speak upon the functions of such organizations, and his remarks brought out clearly the feature of self-protection, to which he applied the term "trades-unionism," implying a tendency which has been generally recognized in later years, but which, we believe, has now for the first time found expression.

Dr. VanderVeer believed that the institution of the Bender Hygienic Laboratory, by removing the necropsies from the hands of the clinicians, had had much to do with the absence of pathological reports and specimens from the meetings of the County Society.

Dr. Ward summed up the debate in a very clear statement of the elements at work in the disintegration of the County Society. The principal factors were the amplification of medical literature, and the comfort of the physician. He drew a fascinating picture of the physician at his fireside, in dressing gown and slippers, with the traditional pipe, informing himself of the abundant medical literature of the day, and contrasted this modern custom with the more irksome task of attendance upon cheerless meetings.

Acknowledging the gradual diminution of activity in the Society during the last twenty years, we cannot believe that the younger men will permit their representative organization to perish. The fireside comforts described by Dr. Ward are the privilege of those who have attained to the "cakes and ale" stage of their professional life, but the "bread and butter" men who are at the threshold of their experience will

not allow themselves to be allured away from their duty. We do not believe that the mere perusal of the literature of medicine, no matter how voluminous or how classical and exact it may be, can ever be a fair equivalent for the meeting of physicians in societies where their patients and specimens are presented and discussed and their views are criticised and perhaps disputed. The fireside reading of literature, while it has its place, is greatly enhanced by discussion. Just as in undergraduate teaching the object of the didactic lecture is to bring out the relative importance of the presented facts, so in the post-graduate work of a County Society discussion answers the same purpose with regard to current literature.

We agree with Dr. Curtis that the County Society has a function beyond the presentation of papers and cases, and that this function is "to draw a sharp line between the reputable and the disreputable in medical affairs," and "to cultivate a wholesome respect for the profession as a profession." But we strongly disapprove of the term "trades-unionism" as applied to this function. As we interpret this phrase a "trades-union" is an association of men in one branch of work, manual rather than mental, for self protection and self-aggrandizement. In "trades-unions" we see little of the spirit of mutual improvement which redounds to the good of the community at large, and to "trades-unions" we attribute much of the disorder and discontent which have proved a source of disorganization of society, of upheaval of order and of loss of life. There may be "trades-unions" of muscles, but there can be no "trades-unions" of brains. Organizations of professional men are not for their protection against the community, but for their individual improvement to the benefit of the community.

The advancement of scientific knowledge by the reading and discussion of papers and the presentation of cases must continue to be the first object of medical societies. Reflected from this are the protection of the community and the dissemination of enlightened views for the preservation of its health. This latter object is not to be gained on "trades-union" principles by efforts at medical legislation for the benefit of the profession, nor by the prevention of legislation against the interests of the profession, but by the elevation of

the learning and dignity of physicians. When this condition is attained the views of the Society pronounced after mature deliberation will be accepted as final and authoritative.

Herein lies the future of the Medical Society. We look for the day when the individual public expression of opinion by a physician shall be regarded as unorthodox and valueless, when news gatherers or promoters shall not get for the asking an opinion which may suit their convenience or further their schemes under the aegis of a medical diploma. At that time all questions of public health, and all projects purporting to be for the common weal, shall be approved or condemned by the recognized body of physicians. For this consummation is needed the effort of the coming generation, who are now, we hope, about to revive their organizations to their pristine glory, and to brighten this lamp of learning which has been slowly growing dim during the transitional period of the last twenty years.

In Memoriam

ANDREW JACKSON ROGAN, M. D.

Dr. Andrew Jackson Rogan, son of the late Hon. James Rogan, of Oswego, N. Y., died August 9, 1901, at Crestone, Col., whence he had gone in hopes of recuperating his impaired health. He was a graduate of the Oswego Normal school, also an alumnus of the Albany Medical College, having graduated with the class of 1894. After graduation he settled at North Bennington, Vt., where he acquired a satisfactory practice. Failing health necessitated his removal to Colorado, in March of the present year. At the period of his untimely demise he held the honorary position of professor of therapeutics at Crestone, Col., where, had he survived, a brilliant professional career awaited him. He was a young man of superior mental calibre and of gentle and refined personal qualities that endeared him to all with whom he associated. He is survived by five sisters, who reside in the metropolis, and one brother, Mr. James Rogan, of Oswego.

Public Health

Edited by Joseph D. Craig, M. D.

DEPARTMENT OF HEALTH—CITY OF ALBANY, N. Y.

ABSTRACT OF VITAL STATISTICS, SEPTEMBER, 1901

Deaths

Consumption.....	16	Albany City Hospital.....	7
Typhoid fever.....	4	St. Peter's Hospital	6
Diphtheria.....	3	Homœopathic Hospital.....	2
Cholera infantum.....	10	County House.....	1
Pneumonia	2	St. Margaret's Home.....	7
Apoplexy.	14	Little Sisters of the Poor ...	1
Bright's disease.....	13	Home of the Aged... ..	4
Cancer.....	10	Hospital for Incurables... .	1
Accidents and violence.....	3		
70 years and over.....	22	Total deaths.....	138
1 year or under	26	Death rate September, 1901..	12.66
<i>Births</i>	102	<i>Marriages</i>	51

VACCINATION NOTES

A decision in regard to the right of the State to pass laws requiring the vaccination of children as a condition to their attending the public schools has been made recently in the State of Pennsylvania.

The father of a child that was denied admission to the public school on account of not being vaccinated in accordance with the rules of the Board of Education and an act of the Legislature, brought a mandamus suit in the City of Philadelphia. The Court of Common Pleas maintained the right of the Board of Education to demand such vaccination, and, on appeal, the Supreme Court sustained the ruling of the lower court in the following terms: "We think that the court below did not err in the ruling referred to." In the case, *Duffield versus Williamsport School District*, we hold that school directors in the exercise of a sound discretion may exclude from the public schools pupils who have not been vaccinated. Whether a resolution, excluding from the schools pupils who have not been vaccinated, is a reasonable one is to be judged of in the first instance by the school

directors. In the present state of medical knowledge and of convincing opinion of those having charge of the public health, the courts will not say that such a resolution is the best of official discretion.

The following figures, taken from a paper on the "Importance of Vaccination" by Dr. Wilhelm Carl Kubin of New York City, may be of interest.

Jenner announced the principle of protective vaccination about the year 1798; before that time smallpox was a scourge all over the world and several times had almost depopulated the countries of Europe. In 1802, four years after Jenner had made public his discovery, a committee of the House of Commons thoroughly investigated the subject and succeeded in finding only two cases in which smallpox had occurred after having been properly vaccinated. In Copenhagen, with over 100,000 inhabitants, where vaccination was universally practiced, not a single death from smallpox was recorded during the thirteen years, 1811 to 1823. In Aispach, Bavaria, with a population of about 300,000, no deaths from smallpox took place in the nine years from 1810 to 1818. Of more than 250,000,000 of people vaccinated in France between the years 1804 and 1812, seven were known to have contracted variola. In Sweden, before the introduction of vaccination, the annual death-rate from smallpox was 20.50 out of over a million of population, while during the forty years, 1810 to 1850, it was but 1.58, and in Westphalia, where the death-rate from smallpox was formerly 26.43 per million, between the years 1816 and 1850 it fell to 1.14, and in Bohemia, Moravia, Austria Silesia it was reduced from 4000 to 200; in Copenhagen from 3128 to 286, and in Berlin from 3422 to 176. During Mr. Marson's term of thirty years in the London Smallpox Hospital 15,000 cases of variola (smallpox) were under his charge; his statistics prove that the unvaccinated die at the rate of thirty-five per cent., while the presumably vaccinated died at the rate of six and one-half per cent.

When smallpox prevails in a community, while some are protected and others not protected, the influence of vaccination is most strikingly shown. Thus in an isolated part of

Bombay, 1848 to 1853, the smallpox deaths among the general population, the majority of which was unprotected, were fifty-eight per cent. of the mortality over all cases, but among the European residents, mostly protected by vaccination, the smallpox deaths were, for the same period but one per cent. of the deaths from all causes. In observations made for twenty-one years on four millions of people in Bohemia, it was discovered that the death-rate among vaccinated persons who contracted smallpox was five and one-sixteenth per cent., while on the other hand the mortality of those who contract smallpox was twenty-nine and four-fifths per cent.

Nothing more clearly exhibits the efficacy of vaccination and re-vaccination than the medical record of the Franco-Prussian war. At that time, according to Dr. Welch, smallpox prevailed to an alarming extent, and both armies were fully exposed to the contagion; but the German mortality was only 263 men, while the French mortality was 23,468, although the latter army was at no time more than half the size of the former.

In no country is vaccination carried on with greater care and fairness than in Germany. Husson and Bousquet were the first to recommend re-vaccination.

It was in Prussia that re-vaccination was first practiced in a way that brought conviction of its value. In that country all soldiers were re-vaccinated. During the period from 1834 to 1848, out of 425,000 cases of re-vaccinations, positive results were obtained in 198,000, 46.58 per cent.; in these years (14) there were but seventy-seven cases of variola and varioloid in the army and among them not a single death.

In 1843 smallpox was epidemic in Prussia, but in the entire army there were but twelve cases.

In Prussia the mortality from smallpox in 1835 was twenty-seven per 100,000, in 1872 it was 262 per 100,000. In 1874 vaccination and re-vaccination became obligatory and the mortality fell at once to 3.60, and in 1886 it was only .39 per 100,000. In 1886 there were 197 deaths from variola in the entire German Empire; in 1887 there were 168, in 1888 there were 112, in 1889 there were 200, in 1890 there were 58, while in 1891 there were but 40 deaths.

The number of deaths from this disease in France was fifty-six times greater; in Austria sixty times greater, and in Italy ninety-seven times greater.

In 1898, ninety-two cases of smallpox were reported in the United States army with twenty-three deaths, and in 1899, 347 cases with eighty-four deaths, a total of 439 cases, with 107 deaths during the two years. Of these cases, 342 with ninety-nine deaths occurred in the Philippines, the fatal cases constituting twenty-nine per cent. of the total number.

Seventy-two cases with three deaths occurred in the United States, the total cases constituting only 4.17 of the total number.

That the regular troops were better protected from the infection of smallpox than the volunteers is shown by the prevalence of the disease among the troops in the Philippines, where large mixed commands of troops operated during the whole year in a largely infected country. Among the mean strength of 22,922 regulars there occurred 110 cases, of which twenty-three proved fatal, while among the volunteers, with a mean strength of 16,358, there occurred 157 cases, fifty-five of which were fatal.

The death rate among the regulars was only one per cent. per thousand men, while among the volunteers this rate was 3.36 per thousand.

Medical News

Edited by H. Judson Lipes, M. D.

MEDICAL SOCIETY OF THE COUNTY OF ALBANY.—The semi-annual meeting was held October 8, 1901, in Alumni Hall. The meeting was called to order by the President, at 9:00 P. M. The following members were present: Drs. Ira Applebee, R. Babcock, George Blumer, T. L. Carroll, D. C. Case, F. L. Classen, D. H. Cook, J. D. Craig, F. C. Curtis, S. L. Dawes, A. W. Elting, W. H. George, L. Hale, W. S. Hale, J. V. Hennessy, E. E. Hinman, H. J. Lipes, H. E. Lomax, A. MacFarlane, H. E. Mereness, J. M. Mosher, G. T. Moston, W. H. Murray, W. J. Nellis, G. W. Papen, C. H. Richardson, A. Sautter, H. L. K. Shaw, W. O. Stillman, G. L. Streeter, C. F. Theisen, A. H. Traver, A. Vander Veer, E. A. Vander Veer, W. J. Wansboro, S. B. Ward and J. W. Wiltse.

The President read the resignation of the Secretary, Dr. H. S. Pearse, as follows:

Bond Building,
Washington, D. C.,
October 7, 1901.

Dr. WM. H. MURRAY,
President, Albany County Medical Society.

DEAR SIR:

I desire to tender my resignation as Secretary of the Albany County Medical Society, to take effect October 8, 1901, and to express regret at the necessity of so doing.

With best wishes for the prosperity and success of the Society, I beg to remain,

Respectfully yours,

HARRY S. PEARSE.

Dr. RICHARDSON proposed that Dr. H. L. K. Shaw be made Secretary *pro tem*. The motion was seconded and carried.

1. Reading of the minutes of the last regular meeting.

Dr. WARD moved that the minutes as printed in the ANNALS be adopted. The motion was seconded and carried.

2. Minutes of special meetings.

The Secretary stated that there were no minutes of special meetings.

3. Reports of officers and committees.

No reports were submitted.

4. Election of members.

There were no names proposed by the Board of Censors.

5. Motions and resolutions.

Dr. MOSHER moved that the sum of fifty dollars be paid annually by the Treasurer of the Society to the ALBANY MEDICAL ANNALS for publishing the minutes of the Society. The motion was seconded and carried unanimously.

6. Miscellaneous business.

Under this head came the election of a Secretary to fill the unexpired term necessitated by the resignation of Dr. H. S. Pearse.

Dr. WARD nominated Dr. H. L. K. Shaw. The nomination was seconded, and it was moved that Dr. MacFarlane cast one ballot for Dr. Shaw. The motion was seconded and carried.

The President announced Dr. Shaw elected to the office of Secretary.

7. The Vice-President's address.

The address on "The Functions of a Medical Society" was read by the Vice-President, Dr. Andrew MacFarlane. After the reading of this address the President, at the request of the writer, opened the meeting for discussion.

Dr. CURTIS moved that a vote of thanks be extended to Dr. MacFarlane for his able address. Dr. WARD seconded the motion, which was carried.

Dr. CURTIS, in discussing the Vice-President's address, said that the county medical societies were losing their function. He thought the

esprit de corps was not so well marked as formerly. The purposes of the Society are not those of reading scientific papers, exploiting personal interests, etc., but more than this, namely, in caring for medical affairs.

It should conserve the trades union spirit in medical affairs and draw a sharp line between the disreputable and the reputable. All respectable members of the profession should be members of the society and combine to maintain its interests, to preserve its spirit and to cultivate a wholesome respect for the profession as a profession. This should be supplemented by papers on medical topics of current interest.

Dr. VANDER VEER said he had long wondered at the disintegration of the County Society. He gave a number of reminiscences of the intense interest of members twenty years ago and of the well-attended meetings. He thought the reason of the discontinuance of presenting pathological specimens was due to the fact that all the autopsies are now performed by members of the Bender Hygienic Laboratory staff. He regretted the meagre attendance during the past few years, which was disheartening to the men who carefully and laboriously prepared papers. In conclusion, he made a strong plea for greater interest and larger attendance.

Dr. WARD claimed that the attendance here was not less than that of other county societies. This is not due to any lack of interest on the part of the members. Physicians of fifty years ago knew little about pathology, nothing of laboratory work, and their education went on for years after graduation. Nowadays the diffusion of knowledge through the medical journals is much greater than formerly and enables one to read scientific papers in comfort at home. A function of the County Society used to be the licensing of medical men. This is now under State control. Legal efforts of the societies against unqualified men practicing medicine have been lamentable failures. The development of specialists has interfered with the popularity of the Society. Medical men, as a rule, do not care to hear dry technical papers along one line. In former years the Society was the only means of communication between physicians and the meetings had a social aspect. Nowadays through the medium of the telephone, hospitals, and in a dozen different ways, physicians come in contact with one another.

Dr. CURTIS offered gratis back numbers of the Transactions of the Medical Society of the State of New York to anyone who wished a set.

Dr. WARD moved adjournment. The motion was seconded and carried, and the meeting adjourned.

W. H. MURRAY, *President*.

H. L. K. SHAW, *Secretary*.

ALBANY MEDICAL COLLEGE: SEVENTY-FIRST SESSION.—The seventy-first session of the Albany Medical College opened on September 24, 1901. Dr. Howard Van Rensselaer delivered the opening address. The following changes in the faculty were announced: Dr. Willis G. Tucker to be professor of chemistry and toxicology instead of inorganic and analytical chemistry and toxicology, thus filling the vacancy created by the

death of Dr. Maurice Perkins. Dr. Howard Van Rensselaer, as professor of materia medica and therapeutics, will lecture upon materia medica as well as therapeutics, Dr. Hennessy having resigned his lectureship on materia medica. The following appointments have been made as clinical professors: Dr. Leo Handel Neuman, theory and practice of medicine and gastro-enteric diseases; Dr. Jesse Montgomery Mosher, insanity, neurology and electro-therapeutics; lecturers: Dr. Charles Harper Richardson, minor surgery; Dr. Arthur Wells Elting, surgical pathology; Dr. George Emory Lochner, gynæcology, and Dr. Arthur Turner Laird, clinical microscopy. Dr. W. S. Hale has been appointed assistant demonstrator in anatomy as well as instructor; Theodore J. Bradley, lecturer on inorganic chemistry; Dr. Spencer L. Dawes, instructor in therapeutics as also in materia medica; Dr. James W. Wiltse, instructor in therapeutics as also materia medica; Dr. George L. Streeter, instructor in clinical medicine and physiology; Drs. James F. Rooney and Eugene E. Hinman, instructors in anatomy and assistant demonstrators of anatomy; Dr. Edward W. Becker, instructor in physiology, and Drs. E. Hudson Rider and Adam J. Blessing, clinical assistants.

ALBANY COLLEGE OF PHARMACY: OPENING OF THE TWENTY-FIRST SESSION.—The twenty-first session of the Albany College of Pharmacy opened October 7, 1901. Dr. Willis G. Tucker delivered the introductory lecture, reviewing the history of this department from its opening twenty years ago. The opening exercises were presided over by President Raymond, of the University. The classes are larger this year than usual and there is a most encouraging outlook for this department.

ALBANY GUILD FOR THE CARE OF THE SICK POOR; STATISTICS FOR SEPTEMBER, 1901.—Number of new cases, 42. *Classification of cases*: Dispensary cases receiving home care, 2; dental, 2; district cases reported by health physician, 7; other charity cases, 22; moderate income patients, 9. *Classification of diseases*: Medical, 20; surgical, 10; gynæcological, 12. This general classification includes 7 obstetrical cases, 4 throat and nose, 2 dental and 1 eye and ear. Number of contagious cases in above list: medical, 5; surgical, 2. Removed to hospitals, 4; died, 3. *Visits of Guild Nurses*: Number of visits with nursing treatment, 450; for professional supervision of convalescents, 228; total number of visits for September, 678. Cases were reported to the Guild by 2 of the health physicians and by 16 other physicians.

Special Obstetrical Department: 2 cases; 1 reported by Dr. Goewey and 1 by Dr. Stevenson, health physicians. Obstetricians in charge, Dr. H. J. Lipes and Dr. H. L. K. Shaw; students in attendance, 2; nurses in charge, 3; number of visits by physicians, 20; by medical students, 4; by Guild nurses, 38; total visits, 62. One patient transferred to hospital.

NEW MEDICAL SOCIETY IN ALBANY COUNTY.—At a meeting of the members of the Medical Association of the State of New York, resident in

Albany county, held at the office of Dr. Van Vranken, recently, the Medical Association of the County of Albany was organized, with the following officers: President, Dr. C. M. Culver; vice-president, Dr. A. T. Van Vranken; secretary and treasurer, Dr. Wm. B. Sabin; delegate to the meeting of the State Association, in New York city, this month, Dr. W. E. Lothridge; alternate delegate, Dr. J. U. Haynes.

AMERICAN MEDICO-PSYCHOLOGICAL ASSOCIATION.—It has been learned that the dates (June 10 to 13, 1902), for the Montreal meeting will conflict with those for the meeting of the American Medical Association at Saratoga. The Council has therefore determined upon a change of dates for the American Medico-Psychological Association to the third week in June, and therefore the Chairman of the Committee of Arrangements, acting under instructions from the Council, has engaged accommodations for the Association at the Windsor Hotel, June 17, 18, 19 and 20, 1902.

BUFFALO MEDICAL JOURNAL; THE SURGERY IN PRESIDENT MCKINLEY'S CASE.—The *Buffalo Medical Journal* for October, 1901, contains a number of special contributions on the surgery in President McKinley's case. Dr. John Parmenter gives an account of the operation, and Dr. Nelson W. Wilson, sanitary officer of the Pan-American Exposition, a complete history of the case, including the official bulletins, the autopsy report, *et cetera*. The subject is also considered editorially. Numerous illustrations add to the value of the number.

THE FIRST EGYPTIAN CONGRESS OF MEDICINE.—Notice has been given to all the representatives of foreign powers at Cairo that the First Egyptian Congress of Medicine will be held at Cairo, from the 10th to the 14th of December, 1902, under the august patronage of the Khedive. The work of the Congress will be especially concerned with the affections peculiar to Egypt, such as for example: Bilharzia hæmatobia, ankylostoma duodenale, bilious fever, abscess of the liver, *et cetera*. Questions relating to the epidemics which regularly visit Egypt and which are therefore a menace to all the Mediterranean ports, as well as prophylactic measures, quarantine, *et cetera*, will be discussed. This Congress can not fail to be of interest to all European physicians, and a large attendance of all interested is desired.

REPORT OF THE CHIEF SURGEON, DEPARTMENT OF THE MISSOURI, FOR THE YEAR ENDING JUNE 30, 1901.—The *ANNALS* has received the report of the Chief Surgeon, Department of the Missouri, U. S. A., Dr. James P. Kimball (A. M. C. '64), for the year ending June 30, 1901. According to his report, the mean strength of the command as given in the medical reports for the year was: Officers, 65; enlisted men, 1,914; total, 1,979. The admissions to sick report during the year were 3,983, of which 3,308 were for disease, and 675 for injury. The admission rate for all causes was 2012.63 per thousand of mean strength, of which 1671.56 were for disease

and 341.07 for injury. The average number daily on sick report was 110, and the constant non-effectiveness per thousand of mean strength, 55.58. In the preceding year ending June 30, 1900, the admission rate per thousand of mean strength was 2029.19, of which 1645.01 were for disease and 384.14 for injury; the average number daily on sick report was 124, and the constant non-effectiveness per thousand of mean strength, 58.38. During the year ten deaths occurred.

NICHOLAS SENN PRIZE MEDAL.—The committee on the Senn Medal call attention to the following conditions governing the competition for this medal for 1902: 1. A gold medal of suitable design is to be conferred upon the member of the American Medical Association who will present the best essay upon some surgical subject. 2. This medal will be known as the Nicholas Senn Prize Medal. 3. The award will be made under the following conditions: *a.* The name of the author of each competing essay shall be enclosed in a sealed envelope bearing a suitable motto or device, the essay itself bearing the same motto or device. The title of the successful essay and the motto or device is to be read at the meeting at which the award is made, and the corresponding envelope to be then and there opened and the name of the successful author announced. *b.* All successful essays become the property of the Association. *c.* The medal shall be conferred and honorable mention made of the two other essays considered worthy of this distinction, at a general meeting of the Association. *d.* The competition is to be confined to those who at the time of entering the competition, as well as at the time of conferring the medal, shall be members of the American Medical Association. *e.* The competition for the medal will be closed three months before the next annual meeting of the American Medical Association, and no essays will be received after March 1, 1902. Communications may be addressed to any member of the committee, consisting of the following: Dr. Herbert L. Burrell, 22 Newbury street, Boston, Mass.; Dr. Edward Martin, 415 S. 15th street, Philadelphia, Pa.; Dr. Charles H. Mayo, Rochester, Minn.

PERSONAL.—Dr. EDWARD L. HANES (A. M. C. '99), Junior Assistant Physician, has been transferred to the Hudson River State Hospital, at Poughkeepsie, from the State Hospital for Epileptics, at Sonyea, N. Y.

—Dr. ANDREW MACFARLANE (A. M. C. '97), has removed from 24 South Hawk street to 198 Washington avenue.

—Dr. WILLIAM J. MCKOWN (A. M. C. '94), 335 Hamilton street, has announced his specialty of electrical treatment and X-ray work.

—Dr. M. WACHSMAN (A. M. C. '01), has located at 1667 Lexington avenue, New York city.

—Dr. G. M. ABBOTT (A. M. C. '79), formerly of Castleton, N. Y., has removed to Saranac Lake.

—Dr. H. L. K. SHAW (A. M. C. '96), has removed his office from 198 Lark street to 198 Washington avenue.

—Dr. HARRY S. PEARSE has been appointed Inspector General of the

Equitable Life Assurance Company for Maryland, Virginia, West Virginia and North Carolina. His headquarters are at present at the Bond Building, Washington, D. C.

—Dr. H. M. CAREY (Johns Hopkins, '01), has been appointed Assistant at the Bender Laboratory and Lecturer on Histology in the Albany Medical College.

—Dr. CHARLES L. WHITBECK, of Cohoes, N. Y. (A. M. C. '01), has been appointed Assistant in the State Antitoxin Laboratory.

Book Reviews

A Text-Book of Ophthalmology. By JOHN W. WRIGHT, A. M., M. D., Professor of Ophthalmology and Clinical Ophthalmology in the Ohio Medical University; Ophthalmologist to the Protestant Hospital, Columbus, Ohio; Member Ohio State Medical Society; Member American Medical Association. Second Edition. Thoroughly Revised. With 117 Illustrations. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1900. 378 Pages.

Dr Wright, in his preface to the first edition published in 1896, states that "the object of this treatise is to provide the medical student with a systematic text in the primary principles of ophthalmology, such as will be a reliable assistance to him in his pursuit of knowledge as a student of medicine."

In pursuance of this plan, the author has very carefully and systematically compiled, from the works of others, the essential facts relating to the anatomy and physiology of the eye, to which he has appended a very complete glossary of the terms relating to ophthalmology.

A well-written and easily-understood chapter on elementary optics, followed by a very clear presentation of the methods of detecting and correcting refractive errors, will appeal to the student to whom this phase of the subject is often difficult of comprehension.

But while there is much to praise in the work, there are some points open to criticism.

An ambiguous phrase frequently mars an otherwise clearly-expressed idea. Again the work shows in a marked degree the individuality of its author, and as he writes of the diseases and injuries of the eye and the proper treatment therefor, his ideas and methods are more personal and biased than is usual in a text-book. Dr. Wright is often iconoclastic. Lines of treatment that have received the sanction and endorsement of the most eminent oculist, at home as well as abroad, are mentioned only to be condemned. Particularly is this the case in the only one to be mentioned, although there are others. Credes' method, the instillation of nitrate of silver as a prophylactic against ophthalmia neonatorum falls under his ban.

This tendency of the author to force upon the mind of the student of ophthalmology his own particular ideas, rather than to give him as well a calm dispassionate discussion of the methods employed by others, with

equal success, must tend to confuse the student, and thus to a certain extent defeat the purpose for which the book was intended. C. H. M.

A Practical Treatise on Diseases of the Skin. By JOHN V. SHOEMAKER, M. D., LL. D., Professor of Skin and Venereal Diseases in the Medico-Chirurgical College and Hospital of Philadelphia, etc. Fourth Edition. D. Appleton & Company, New York. 1901. 892 Pages.

Doubtless a conscientiously revised new edition of a work of a competent and well-known author is in many respects to be preferred to a newly-written book of one less known and respected. It is seldom that it is possible to do this freely; electrotyped pages are very inelastic. Shoemaker's present volume contains many pages that appeared in the edition of four years ago, which is to be expected. Even with a growing subject, much of the matter can call for little change. The author, in the light of his own experience and advancing thought, would without doubt phrase his words on not a few topics from a new point of view. The lecturer in the medical school finds himself from year to year putting things differently, as his own contact with patients and suggestions imbibed from others lead him to new light. In the large field of skin diseases the general trend of knowledge of histology, etiology, pathogenesis and treatment is modifying steadily. Its activity is shown by the growing and renewing literature. The relation, for instance, of the nervous system to the normal and abnormal skin, the influences of micro-organisms and parasites in causing cutaneous disorders, the effects of various remedies, and with all the personal experience of the observer himself, are matters of study always enlarging. And this makes every press issue from the pen of each considerate individual a contribution. Our present author has added much to and amended not a little of the volume he last gave us, and his book is quite what it purports to be, a practical treatise of value to practitioners and students. We would suggest to the publishers a change that would help the reader very greatly, viz., in the headlines of pages, to carry the immediate and not the general topic. One does not want to be compelled to consult the index to find eczema, which only the expert reader would look for under the term exudations, and it is somewhat exasperating to a busy reader to not have this ready reference help, even though well compensated, as here, with what he finds after his search. F. C. C.

Manual of Diseases of the Skin, with an Analysis of Twenty Thousand Consecutive Cases. By L. DUNCAN BULKLEY, M. D., Physician to the New York Skin and Cancer Hospital; Dermatologist to the Randall's Islands Hospital; Consulting Physician to the New York Hospital, Hospital for Ruptured and Crippled, and Manhattan Eye and Ear Hospital, etc. Fifth Edition. G. P. Putnam's Series.

This book consists of a treatise on skin diseases, put into compact form. Without lengthy discussion it takes up the whole subject, and in the main

gives the author's own views. It has been long before the medical public and now appears in new form, not of volume, for it remains the small duodecimo, but of revised contents, and may be well said to represent the last word on a growing subject. It will certainly find a welcome again, both it and its author being very well known to the profession. F. C. C.

Current Medical Literature

SURGERY

Edited by A. Vander Veer, M. D.

Chronic Anchylosing Inflammation of the Vertebral Column. (Ueber chronische ankylosirende Entzündung der Wirbelsäule.)

OTTO BENDER. *Muenchener medizinische Wochenschrift*, March 12, 1901.

The writer briefly discusses the literature bearing upon this interesting condition. Von Bechterew first called attention to the disease in 1893 and described five cases, in addition to which he has described two subsequently. He called it "stiffness of the vertebral column with kyphosis," and considered it a peculiar disease entity. Strümpell and others have reported similar cases which, however, were associated with ankylosis of other joints. Of the latter variety a considerable number of cases have been reported, and they appear to be of a rheumatic character which did not appear to be true of the cases reported by von Bechterew. The cardinal symptoms of the disease as described by von Bechterew were more or less limitation of movement of the whole or a part of the vertebral column, without pain and not associated with any affection of the other joints, a dorsal kyphosis, a paretic condition of the muscles of the back and shoulders, at times also of the muscles of the neck and extremities, as well as irritative symptoms of the motor nerves and disturbances of sensation. The disease began in the cervical region and extended downward. Trauma and heredity were considered to be etiological factors.

The writer reports a case of a young woman of twenty-four years, a tailoress by occupation, who was accustomed to sit for nine or ten hours a day with the back somewhat bent over. Four years previously the disease began with pains in the sacral region of unknown origin, there being absolutely no rheumatic history. Gradually a stiffness of the lumbar portion of the spine developed, which extended upward until at the end of four years there was a total ankylosis of the vertebral column with a kyphosis of the cervical region. The thorax was flattened and almost incapable of expansion, evidently as a result of an ankylosis of the articulation of the ribs with the vertebræ. All of the other bones, joints and muscles appeared to be normal, as did the internal organs.

An interesting case has been reported by Milian in which there was a complete ankylosis of the vertebral column due to an ossification of the vertebral ligaments. The fact that radiographs of the writer's case showed no deformity of the vertebræ suggesting arthritis deformans, together

with the absence of all rheumatic history, the freedom of other joints from involvement, together with the youth of the patient, led his to assume that in his case the stiffness is due to an ossification of the vertebral ligaments.

The writer believes that the process begins as a disturbance of nutrition of some portion of the vertebral column resulting from a constant strain of mal-position.

The Surgery of Carcinoma of the Stomach. (Die Chirurgie des Magen-carcinoms.)

H. LINDNER. *Berliner klinische Wochenschrift*, March 4, 1901.

Surgery of the stomach is essentially a product of the 19th century and really dates from 1881, when Billroth first successfully removed a carcinoma of the pylorus. The wide interest aroused in the surgical treatment of carcinoma of the stomach has led to the development of modern surgery of the stomach. Gastrostomy may be considered as the first variety of operation to be performed upon the stomach. This was first done by Sedillot in 1849. In certain clinics the results of gastrostomy have been very satisfactory, while in others they have not.

Following Billroth's operation in 1881, many surgeons showed a remarkable eagerness to attack carcinoma of the stomach, without regard to the extent of the process or the existence of metastases. The results of the majority of these operations were in the main unsatisfactory, and this led to the development of the strongest pessimism in connection with the surgical treatment of this disease.

Interest was again aroused in the subject by the introduction, by Wolfler, of gastro-enterostomy. This led to a restriction of the radical operation to those cases in which the carcinoma was in an early stage. Racker modified Wolfler's operation by the introduction of retrocolic gastro-enterostomy. Murphy's button found much favor with surgeons for a time, but its use to-day is much restricted, and many surgeons do not use it at all. Enterostomy as an accessory to gastro-enterostomy is much in favor with many surgeons to prevent the formation of the *circulus vitiosus*. Witzel has recently advocated gastrostomy as an accessory to gastro-enterostomy, an operation which does not appear to meet with favor. As for the results of surgery of the stomach, although the mortality rates differ considerably in different clinics, it appears to be about twenty-five to thirty per cent. after resection of the stomach and fifteen to twenty per cent. after gastro-enterostomy, that is, upon cases of carcinoma of the stomach, the mortality rate of these operations upon other conditions of the stomach than carcinoma being decidedly less. There are a few cases in which resection of a portion of the stomach for carcinoma appears to have effected a cure, and the condition of many of the patients has been decidedly improved.

Gastro-enterostomy in many instances affords the greatest relief from the distressing symptoms, and in some instances the patients enjoy good health for as much as two and three years.

Mikulicz has recently attempted to systematically remove the lymphatic glands in the region of the stomach. It is too early, however, to form an estimate of the value of this procedure. It is therefore apparent that there is a necessity of an early diagnosis if carcinoma of the stomach is to be treated successfully, and as soon as the existence of such a process is suspected a laparotomy should be done. When a palpable tumor exists, it is generally too late to attempt removal.

A Case of Apparent Primary Cancer of the Ulna. (Ein Fall von scheinbar primären Cancroid der Ulna.)

OTTO FITTIG. *Beiträge zur klinischen Chirurgie, Band 29, Heft 3.*

There has been much difference of opinion as to the possibility of primary carcinoma of bone. According to the Thiersch-Waldeyer theory as to the epithelial origin of carcinomata they cannot originate from bone. Virchow, on the other hand, maintains that carcinomata need not necessarily originate from epithelium, but may take their origin from the mesoderm through a metaplasia of the cells. According to the views of Cohnheim and Ribbert, it is possible that carcinomata of bone may develop from epithelium misplaced during embryonic development, or in extra uterine life from misplacement of epithelium resulting from pathological processes or trauma.

The writer reports a case of a man of fifty-three years who fell from a ladder and injured his right fore-arm; there was no abrasion of the skin. Pain and swelling developed immediately, which continued for the six weeks prior to his admission to the hospital. At the time of admission there was a tumor on the dorsal and ulnar surface of the right fore-arm about the size of a hen's egg of firm consistence and smooth surface. There was no evidence of glandular involvement; the tumor was extirpated and found to be a perfectly typical epithelium containing pearls. At the time of operation no primary growth in any other part of the body was discovered, although a very careful examination was made. The writer, however, made another very careful examination of the patient a short time after the operation and discovered an irregular, ulcerated tumor the size of a bean situated upon the left ary-epiglottic fold. There were absolutely no symptoms pointing to the existence of this tumor; it was removed and found to be a typical epithelioma. The tumor of the fore-arm, was thus proven to be a metastasis. There are a few cases in the literature similar to this one, which the writer briefly discusses.

He calls especial attention to the tendency of carcinomata of the thyroid to metastasize in bone, and suggests careful examination of the thyroid in all cases of suspected primary carcinoma of bone.

From a careful study of the literature, he is unable to find but very few cases in which the supposed primary carcinoma of bone may not have been a metastasis.

OBSTETRICS AND GYNAECOLOGY

Edited by James P. Boyd, M. D.

Notes on a Case of Double Uterus (Uterus Septus) and Double Vagina.
DAVID TINDAL. *Glasgow Medical Journal*, September, 1900.

The case is chiefly of interest on account of its rarity. The patient, aged twenty-three, was admitted to the Glasgow Hospital for Women, on account of severe pain in the left iliac region of two years' duration. The pelvic examination was made under chloroform. The external genitals were normal, with the exception that the labia minora were elongated. Perineum slightly lacerated. A fleshy septum was found to the left of the middle line of the vaginal walls, dividing it into two parts. Septum was not complete, but was perforated, perforation being about the size of a crown piece. Right vaginal orifice was found gaping unduly, and the entire cavity could be well seen without the use of the speculum. The portio vaginalis pointed downwards, backwards and to the right. It was of normal size. Sound passed two and one-half inches and pointed slightly to the left of the middle line. Left vaginal orifice about half the size of right, but admitted two fingers. Sound passed two and one-half inches upwards to the middle line. There were two uterine cavities, one distinct from the other, and on passing a sound into each there did not seem to be any communication between the two. Bimanually only one uterus could be felt. Right ovary was of normal size, and left was also normal, but could only be felt per rectum. While the patient was under observation menstruation occurred, and on careful examination it was found that the menstrual fluid came from the right cervical canal. There was no change in the left, except some slight congestion around the os externum.

Notes of Two Cases of Cranial Depressions in New-Born Infants Successfully Treated by a New Method.

J. M. KERR. *Glasgow Medical Journal*, January, 1901.

In the first case the child was delivered with forceps, the head having taken up an occipito-posterior position, and the second stage being prolonged. With a moderate degree of traction the woman was delivered of a female child of average size. Child was slightly asphyxiated and had a deep spoon-shaped depression of the right frontal bone. While examining the indentation, it occurred to the author that sufficient pressure might be exerted on the depressed bone, by compressing the head firmly antero-posteriorly, to cause it to spring out. The depression came out on the first attempt, producing a sound as when a dent in a felt hat is removed. The author then tried the effect of compression on artificially produced depressions of still-born children. In all cases, when it was possible to produce such depressions, the indentations were relieved by antero-posterior compression, indentations of the parietal bones particularly, coming out with great ease. The second case occurred in the service of another physician in the Maternity Hospital. The patient had been previously

delivered of two dead children, the first after craniotomy, and the second after induction and craniotomy. At the third confinement the child presented by the breech. Extraction of the head was attended with great difficulty, as the pelvis was very much deformed. Over the left frontal bone there was a large, deep, spoon-shaped depression. Artificial respiration brought about little improvement in the child's condition. The author's method was then employed, with the result that the indentation came out suddenly with a jerk. Child almost immediately after began to make attempts at respiration, and the heart commenced to beat more strongly. Author in conclusion states that while the two cases described are the only two living on whom this simple method has been tried, he is hopeful that it will be successful in most cases, because as has been pointed out by Murray, compression of the skull in an antero-posterior direction brings about an elongation of the vertical diameter of the head, and indentations are almost always situated in the parietal or frontal bones.

The Treatment of Septic Infection Originating from the Uterus. (Die Behandlung der vom Uterus ausgehenden septischen Infection.)

ABEEL. *Berliner klinische Wochenschrift*, No. 48. 1900.

In spite of the most careful aseptic technique, infections of the uterus are of not infrequent occurrence; particularly is this the case in the practice of careless physicians, and still more careless midwives. Prochownik states that 5,000 women die in child-bed every year in Germany. This does not, of course, include abortion. Aside from child-bed and abortion, the most common causes of uterine infection are: operations upon the interior of the uterus and sloughing of uterine tumors. The so-called septic infections of the uterus caused by the pyogenic cocci are to-day distinguished from uterine infections due to the gonococcus, the tetanus or diphtheria bacilli. Brunner classifies general infections as follows:

1. General infections caused by pyogenic micro-organisms.
2. General infections caused by the combined action of pyogenic and putrefactive micro-organisms.

General infections may further be classified into mono-infections and mixed infections.

Treatment depends upon whether the process has become a general one or whether it is localized in the uterus or adnexa.

The first thing to be done is to determine whether or not there are any bits of placental tissue in the uterus. To determine this the writer advises the introduction of the finger into the uterine cavity. In some instances the removal of the placental tissue is followed by decided improvement, while in other instances the infection grows worse. The writer has very little faith in the use of uterine irrigations, but if such are to be used, advises lysol. He also discusses the use of irrigations with alcohol, but does not feel that this method of treatment has any special value. Among the more radical methods of treatment he mentions the introduction of live steam at 110 degrees C. into the uterine cavity for thirty seconds,

which in some instances seems to have been followed by satisfactory results. Considerable attention is devoted to the extirpation of the infected uterus. This would appear to be indicated in certain cases where a general infection does not already exist. The writer also discusses the use of the antistreptococcus serum, but does not consider it of any special value. He therefore comes to the conclusion that active stimulation with a supporting diet are the most important factors in the treatment of extensive uterine infections.

The treatment of localized accumulations of pus in the vicinity of the uterus is free drainage, either through a vaginal puncture or abdominal incision.

PSYCHIATRY

Edited by G. Alder Blumer, M. D.

Psychoses following Pelvi-Abdominal Operations.

J. HALLIDAY CROOM. *Edinburgh Medical Journal*, March, 1901.

The author refers to the mental disturbances following surgical operations and anæsthesia, and during pregnancy and in the puerperium, and reports cases illustrating the unfortunate mental effects of operations which are otherwise successful. His first case is that of a young woman who was curetted for villous endometritis. The recovery was perfect, but several weeks afterward she took an inordinate dislike to her own child, and was committed to an asylum. The second case was that of a young unmarried woman, presenting a uterine polypus, which was successfully removed. Two months after the operation the patient developed the delusion that she had been delivered of a child, and that she had become, as a result, an outcast. Another case in minor gynæcology was one of spasmodic dysmenorrhœa, for which dilation of the cervix was undertaken with great relief. After two months the patient became violently maniacal. The fourth case was one of a successful operation for a simple ovarian tumor, in which mania developed on the day following the operation, resulting in rapid exhaustion and death. In three additional cases of ovariectomy and hysterectomy, active insanity ensued. In all of these cases the operations, *per se*, were successful, and there was, as far as the author could trace, no hereditary tendency to insanity. Undoubtedly the first ætiological factor is heredity, and the second sepsis, although beyond these a group of cases may be found in which the cause lies in the loss of blood or defective action of the kidneys. It should also be remembered that in removal of the ovaries a premature climacteric is induced, which subjects the patient to a severe and untimely shock, with the need of readjustment of her life. The author's paper was not written with reference to the effects of gynæcological operation upon insane women, but he believes that the general consensus of opinion, from alienists and neurologists alike, is that operation has a place for the relief of disorders occurring among the insane as well as among the sane, but that as a great curative measure for insanity, it plays a small and comparatively unimportant part.

The Psychological Complications of Stuttering. (Die psychischen Erscheinungen des Stotterns.)

ALB. LIEBMANN. *Monatsschrift für Psychiatrie und Neurologie*, March, 1901.

The prominent symptom of stuttering is the interruption of speech by incoordinated movements of the muscles of respiration, voice and articulation. In addition to this there is nearly always a row of mental disturbances, whose significance is not made clear in work upon the subject. The author directs attention to the origin of the secondary manifestations, showing that they are artificially produced complications of stuttering, generally from mistakes in training and from want of appreciation of the true nature of the conditions. The difficulty of speech is accentuated by anxiety, which attends the attempt at enunciation. Stuttering is often assumed by the parents and teachers to be due to lack of training, and the attempt is made to correct this by chastisement or reproach. This leads to the accentuation of the nervous condition, which is one of the essential elements of the condition. Ridicule is also resorted to, and children in school are made the objects of the laughter, both of their comrades and of their masters. Other children are subjected to mockery. All of these measures tend to increase the anxiety which accompanies efforts at speech, and render the accomplishment much more difficult. It is noted that the stutterer has difficulty with some words or syllables, every attention is given to these, and the patient is required to practice the enunciation in order to overcome the obstacle. He consequently approaches the troublesome syllables with greater and greater diffidence, and the enunciation becomes more and more complicated. There is thus added to the involuntary affection a complicating voluntary disorder, which renders the patient much more uncomfortable and incompetent. In addition, there finally appear associated movements. These are partly of subjective origin, and partly result from instruction. First among them are the forced respirations. The child learns or is taught to inhale deeply, in order that there may be a full volume of air to force the articulation. The uncomfortable sense of fulness in the chest and the excessive expiration only add to the awkwardness, and are of no service, but augment the irregularities of the speech. Other movements are made, first to anticipate the stuttering, and replace it, and then to divert the victim from the incoordinated action of the muscles. In some cases the child has been taught to strike a forcible blow upon the table.

The author's method of treatment is based upon a system of practice with prolonged enunciation of vowels. He uses this at the beginning, and finds that the patient responds quickly, that the psychical disturbance which is complicating the original affection as a feeling of dread, is at once relieved, and that in this way a start is made toward overcoming the difficulty and toward relief of the complicating anxiety. In this way the associated movements of the mouth, larynx and respiratory muscles are overcome.

The Clinical Symptoms and Pathological Anatomy of the Post-Infectious and Intoxication Psychoses. (Zur Klinik und pathologischen Anatomie der postinfectiösen und Intoxicationspsychosen.)

O. BINSWANGER and H. BERGER. *Archiv für Psychiatrie und Nervenkrankheiten, Band XXXIV, Heft 1, 1901.*

Binswanger has pointed out in a previous communication (*Berliner klinische Wochenschrift, 1897*) upon the exhaustion psychoses the difficulties attending attempts to formulate the differential diagnosis upon coordinated anatomical and clinical conditions, and the authors of the present paper find the same embarrassment in the treatment of the subjects under consideration. At best, they can only arrange groups of cases upon a symptomalogical basis, due to the varied effects of injuries to the nervous substance, and in their arrangement they find that the post-infectious and intoxication psychoses are closely related to the exhaustion psychoses. In any event the severity of the pathological process and its period of development and duration have more to do with the character of the symptoms than the particular character of the lesion. Numerous authors regard the partial or complete destruction of the cellular chromatic substance—chromatolysis—as the essential pathological process in mental cases, but Binswanger and Berger believe that the degeneration of the achromatic substance—achromatolysis, or plasmolysis—is the important lesion. In the exhaustion psychoses the lack of proper nutrition of the cell leads to more or less gradual impairment, which is manifested clinically in two classes of cases: first, those followed by restitution and health, and, secondly, those in which partial recovery occurs, and the patient survives, but with a mental defect. In the acute and fatal cases, which run a rapid course, different conditions are present, indicating the probable advent of a toxic element, but these cases may be less severe, and thus clinically toxic and exhaustion conditions may approximate one another. The authors report cases of primary dementia (“amentia”) or stupor following infection, in one case from the intestinal tract (typhoid?), in another in which streptococci and staphylococci were obtained by lumbar puncture. The literature of such cases is scanty, and leads naturally to the consideration of acute delirium. The authors summarize the conclusions regarding acute delirium as displayed in the literature, from which the bulk of opinion points toward two propositions: either, first, that in this disease, the brain is a *locus minoris resistentiæ*, so that with a general infection the cerebral symptoms predominate; or, secondly, that certain toxins have an especial affinity for the central nervous system.

The writers report two cases with necropsies, showing wide-spread cell-degeneration in the cord and cortex, acute degeneration of the medullated fibres, with emigration of leucocytes and hyperæmia—acute encephalomyelitis—in which an influenza infection appeared from the history most probable. The two prevailing theories of the pathology of acute delirium point to either an infection or a toxic disease. The two cases reported by the authors indicate strongly an infection, the pathogenesis having been indicated by the violence of the infection, the condition of the infected organism, and the rapidity of the course of the disease to its fatal issue.

PATHOLOGY

Edited by George Blumer, M. D.

A New Study of Myopathic Articular Lesions from the Standpoint of Pathological Anatomy and Pathogenesis. (Nouvelle Etude anatomo-pathologique et pathogonique des Lésions articulaires myopathiques.)

DE GAULEJAC. *Gazette des Hopitaux Civils et Militaires*, 74th year. No. 13.

De Gauléjac records a very interesting experimental and clinical study of the myopathic arthropathies. The subject was studied experimentally in rabbits, by producing either a paralysis of part of the muscles about a joint or of all of them. Clinically the joints of paralytic children were studied by means of the X-rays. The author comes to the following conclusions:

1. That if true paralytic luxation is very rare, one frequently finds in amyotrophies more or less marked displacements of the articular surfaces to which the name of paralytic sublaxations might be given.

2. In generalized amyotrophies and flaccid paralyses bony alterations never occur; displacement of the articular surfaces is rendered possible by a passive elongation of the ligaments and the peri-articular structures; the weight of the limb is the active agent. In partial paralyses on the contrary with retraction of antagonistic muscles, deformities of the bones are produced under the influence of the persistent traction of certain groups of muscles. The articular cavities widen, whilst their depth diminishes up to the point of complete obliteration. In this class of cases there is marked thickening of the capsule and the sublaxation is due to the deformity of the bones.

3. The myopathic arthropathies constitute from the view point of pathological anatomy, a well-defined entity, quite distinct from other articular lesions, and particularly from the common pathological luxations and congenital luxation.

Experimental Study on the Heredity of Tuberculosis. (Experimentelle Studien über die Erblichkeit der Tuberculose.)

FRIEDMAN. *Deutsche medicinische Wochenschrift*, 1901. No. 9.

To determine the direct heredity of tuberculosis, it is necessary to differentiate (a) the placental infection carried by the maternal circulation, (b) the conceptional, introduced with the semen. The first method has been determined in a number of cases of tubercular mothers, both human and animal, while the second, although highly probable, has not previously been demonstrated. It is necessary to prove that virulent tubercle bacilli are contained in the semen, and that the tubercle bacilli have been introduced directly with the semen and not indirectly through the mother. The first condition that tubercle bacilli are found in the semen of men with tuberculosis, even without genital tuberculosis, has been often shown,

but the exact determination that tubercle bacilli introduced into the vagina at the same time as the semen may infect the ovum direct, without contact with the mother, has thus far failed. The author injected dogs after connection with a few drops of a sterile saline solution of tubercle bacilli. The syringe had the length of the erect penis. Examination an hour later showed the presence of many spermatozoa and some tubercle bacilli. The dogs were killed six to eight days after impregnation. Serial sections of the impregnated uterus were then examined. Most of the tubercle bacilli were found in the embryonal cell-layer, *i. e.*, intracellular. Some were seen in the space between this layer and the zona pellucida, while in zona pellucida itself once only were bacilli found. The maternal organs were always entirely healthy and not a single bacillus was found in the mucous membrane of the uterus or vagina. The impression was gained that all the bacilli which had not entered ova were eliminated by the genital organs. This experimental result agrees with clinical observations, and also shows that syphilitic infection may be conveyed to the foetus without infecting the mother.

CLINICAL PATHOLOGY

Edited by Arthur W. Elting, M. D.

Concerning the Increase of Tubercle Bacilli in Sputum, with Remarks on Hesse's Method of Examination. (Ueber die Vermehrungsfähigkeit der Tuberkelbacillen im entleerten Sputum nebst Bemerkungen über das Hesse'sche Züchtungsverfahren.)

R. GAHTGENS. *Zeitschrift für Tuberkulose und Heilstättenwesen*, Bd. I, Heft 5.

Sometime ago Hesse introduced a method of cultivating tubercle bacilli from sputum on a new medium, the important element of which was an artificial food stuff known as Nährstoff Heyden. Hesse's method of procedure was to spread his medium, which was agar, with the addition of the artificial food, out in Petri dishes, and then to smear a very small quantity of sputum over the surface of the medium. In from twenty-four to forty-eight hours preparations were made by placing a cover glass on the surface of the medium over one of the small collections of sputum, pulling this off, and then staining it in the usual manner. The result was a well-marked increase in the number of tubercle bacilli, as well as an increase in size and length of the pre-existing bacilli. Gähtgens tried a number of experiments to find out whether it was the Nährstoff Heyden which led to the increased growth of the tubercle bacilli. He found that he could get a similar increase in growth by using simple glycerine agar, and further that by simply putting the sputum in a moist chamber, that a similar increase took place here without the presence of any nutritive medium whatever. He comes to the conclusion that with this method of procedure it is the sputum, and not the artificial culture substance, which acts as a favorable culture medium for the tubercle bacilli.

Concerning the Co-operation of Micro-organisms in the Origin of Venous Thrombi. (Ueber die Mitwirkung der Mikroorganismen beim Entstehen der Venenthrombose.)

M. JAKOWSKI. *Centralblatt für Bakteriologie. Bd. XXVIII, No. 23.*

The author had observed clinically within the last few years an unusual number of cases of venous thrombosis occurring in infectious diseases. He mentions cases which he had observed in connection with typhoid fever, croupous pneumonia, puerperal sepsis, and general septic conditions. As a result of his experience, he was led to make a series of experiments, of which the purpose was to determine the part played by micro-organisms and their toxins in these thromboses. He experimented mainly upon rabbits, but also upon guinea pigs, injecting either bacteria or their toxins into the circulation and at the same time causing a retardation of the circulation, either in an extremity or the ear, by means of an æsthetic bandage. He made control experiments to show that this retardation was in itself insufficient to cause thrombosis. The organisms which he worked with were the typhoid bacillus and the diphtheria bacillus and their respective toxins. As a result of his experiments, he came to the conclusion that these two organisms had different powers as regarding their tendency to cause thrombosis, the typhoid bacillus being much the more powerful of the two. He was able to produce thrombosis with the culture of the typhoid bacillus in the great majority of cases. With the typhoid toxin he produced thrombosis in a fair number of cases. With the diphtheria toxin he was unable to cause the formation of thrombi. With the diphtheria bacillus itself he occasionally caused it. He expresses the opinion that bacteria themselves are more liable to produce thrombi because they are able, after their lodgment on the wall of the vein, to produce toxins on the spot, whereas, if merely the toxins themselves enter the circulation, they are greatly diluted by the blood, and stand very little chance of producing a local influence on the vessel walls.

Bacteriological Examinations of the Blood in Pneumonia. (Bakteriologische Blutuntersuchungen bei Pneumonien.)

PROCHASKA. *Centralblatt für innere Medizin, November 17, 1900.*

The fact of the presence of the pneumococci in the blood of patients sick with pneumonia is still disputed. Some investigators have never found them in the blood, while others have detected them very often. The writer found that when small quantities of blood were taken, variable results were obtained, but if four-fifths cubic centimeters of blood were used in the cultures of bouillon a positive result was obtained. The blood was taken from one of the veins of the arm and a few drops as a control were inoculated into an agar culture and into bouillon, but with negative results. Ten cases are reported. One had an empyema, two acute nephritis and one gangrene of the lung. Four died. In the bouillon cultures pneumococci developed in every culture, while in the agar culture,

where a small quantity of blood was employed, they appeared in only three cultures. In two cases in which white mice were inoculated, pneumococci were found in the heart's blood and in the spleen. Pneumococci were detected in the sputum in four cases.

Polynuclear Hyperleucocytosis as a Diagnostic Sign in Abscess of the Liver. (De l'hyperleucocytose polynucléaire comme élément de diagnostic de l'abcès du foie.)

BOINET. *Gazette des Hopitaux Civils et Militaires*, 73 year, No. 148.

Boinet, in a short note on this subject, reviews the literature and reports two cases of his own. He claims that a diagnosis of abscess of the liver can be aided in doubtful cases by a blood count. He makes the statement that in abscess of the liver there is a greater leucocytosis than in other forms of abscess. The increase in leucocytes varies from six to ten times the normal.

Internal Secretions. (Ueber innere Secretion.)

KOHN. *Prager medicinische Wochenschrift*, October 18, 1900.

Bernard discovered internal secretions from the observation that the liver not only secreted bile but had a glycogenic function, whose products passed into the blood. He found that a gland, in addition to its known secretion which had a local action, had internal secretion which passed into the circulation and influenced the general organism or some special organ.

Recent investigations have shown that the pancreas has a double secretion, one into the duodenum and a glycolytic into the circulation, and the absence of this internal secretion induces a form of glycosuria.

Organs can therefore be divided into those which have only an internal secretion, as the thyroid, pituitary body, suprarenal bodies, and those which have a double secretion, as the liver and pancreas.

In the pancreas, in addition to the more abundant true cellular tissue, there are the Langerhans' islands(?) intertubular cell-groups. These have the type of epithelial cells and consist of ramifying columns of cells with blood vessels running between. It is possible that this is the place of origin of the internal secretion. For this internal secretion it is not necessary that the organ should be in any fixed place. It can be in any place where it can give up its products into the general circulation. The thyroid, the pituitary body, the supra-renal bodies can perform their function any place where they can exist. This is seen in accessory organs, in metastases following carcinoma of the thyroid and in successful transplantation of the thyroid. If there is a loss of an ordinary secretion, then the substance substituted must be brought to that place where the secretion is normally present as the administration of hydrochloric acid and pepsin when the activity of the gastric cells is lost. The internal secretions, when introduced subcutaneously or intravenously or by mouth into the circulation, accomplish their work.

Brown-Séguard, on account of the influence upon the body exercised by puberty, pregnancy, menopause and castration, believed that an internal secretion from the genital organs affected, in a marked degree, the entire system. Experiments have been made to determine internal secretions in many of the organs and tissues. The influence upon the blood pressure of these secretions has been determined. The attempt has been made, especially by French authorities, to call every extract an internal secretion if it raised the blood pressure. This is due to the metamorphic changes in tissue and not to a true secretion. Some of the organo-therapeutic procedures remind us of the adventuresome measures of an age long past. The following conclusions are then given:

1. A secretion occurs only from characteristic cells which, according to their character, belong to the epithelial cells. They may appear singly as secreting cells, or combined as glands.
2. The secretions in general pass outwards, and in typical glands have a characteristic epithelial outlet to a definite point.
3. There are glands and structures of a glandular nature which do not have an especial outlet. Their secretion passes directly into the circulation and is called internal. Their action is not localized but general.
4. It cannot be denied, that metamorphic products of other than glandular organs can have a marked effect upon the organism. This fact is not sufficient to warrant us in calling such organs glands with an internal secretion.
5. The Organotherapy is concerned with the replacement of the loss of this internal secretion.

PEDIATRICS

Edited by Harry L. K. Shaw, M. D.

Disease of the Spinal Cord in Hereditary Syphilitic Infants. (Ueber Erkrankungen des Rückenmarks bei hereditär-syphilitischen Neugeborenen und Säuglingen.

R. PETERS. *Jahrbuch für Kinderheilkunde, March 1, 1901.*

The author believes that the pseudoparalysis of Parrot, osteochondritis syphilitica of Wegner and myotonia neonatorum of Hochsinger are essentially the same and caused by syphilitic lesions in the nervous system. The spinal cord of new-born and young infants is just as apt to participate in the syphilitic process as the other tissues. This results in paralyses, the train of symptoms of which depend and vary on the segment of the spinal cord affected. These paralyses, he claims, are almost pathognomonic of lues. He goes on to describe eleven cases that have come under his observation. The differentiation from obstetrical paralyses form the chief difficulty in diagnosis, and a correct diagnosis is important, for the prognosis of the syphilitic forms is good, and recovery is rapid under proper treatment. He advises the administration of calomel and potassium iodide for the mother and mercurial inunctions for the infant.

ALBANY MEDICAL ANNALS

Original Communications

ADDRESS *

By WILLIS G. TUCKER, M. D.,

Professor of Chemistry.

GENTLEMEN :—We meet to-night to open, in this formal and old-time manner, another lecture course in the Albany College of Pharmacy. I have sometimes thought that the custom of thus inaugurating our session might be more honored in the breach than in the observance, and when, with a smaller faculty, it fell to my turn to perform this service every three years, I perhaps held to this opinion even more strongly than at present. With a larger faculty seven years have elapsed since last it was my turn and privilege to welcome you to this place, and so my satisfaction is the greater because my opportunities of late have been the less. And there may be, after all, some advantage gained by perpetuating old customs like this. Our lives are naturally divided into various epochs which connect themselves with certain days, red-letter days, perhaps, as we look back in after-time upon our past experiences, and in this later view as also in the present happening there is possibly a greater satisfaction if these periods are clearly marked in some peculiar way. It is this feeling which prompts us to celebrate our birthdays and those other anniversaries which we like, in some way, to distinguish, and if, as we grow older, we come to attach something less of importance to such commemorations, and incline to view all days alike, we have no need to plume ourselves on such an attitude, because it may be but one sign the more that we are losing something of our zest and inter-

*Delivered at the opening of the Albany College of Pharmacy, October 7, 1901.

est in affairs and look on life with sterner view and in a prosier way. If this indeed be so we have no reason to congratulate ourselves upon the fact, for, to my thinking, since we largely make, each for himself, our lives, it greatly signifies whether we retain a lively interest in the little things that in the aggregate fill out our days, and take a hopeful and a pleasurable interest in these events, or whether, through a repression of these sentiments we come to look upon the beginnings we make, or the recurring round of duties and cares, as irksome tasks and pleasureless toil. The custom then of marking particular periods by particular observances has something to recommend it, and may not be disposed of by declaring it mere sentiment, because it is such sentiment as this that relieves life of some of its drudgery, and adds an interest to the commonplace things that fill up so largely our ordinary days.

But this apology for the making of an address on occasions such as this has delayed somewhat the expression of the pleasure and the satisfaction I feel in welcoming you to-night. To those who were our students last year I need only say that your return is evidence, gratifying indeed to us, that you feel sure that you have made no mistake in the choice of your vocation or the selection of a place in which to pursue your studies. The young man who has no natural aptitude, nor special preference for work in life; who does not feel called to some occupation, but follows the example of another, or listlessly complies with the wishes of parent or guardian, is indeed to be pitied, while he who, drawn by a natural, perhaps an irrepressible instinct, and actuated by a controlling purpose, enters with enthusiasm upon a course of life that he has planned in accordance with natural inclination, is to be congratulated, because that labor is easy which is prompted by liking and inspired by hope, and half the battle is gained when we have discovered the place for which we are fitted in life and have entered upon that course of training which is to qualify us to occupy it with credit to ourselves and satisfaction to others. And to you who have come here for the first time, and whose coming has in it something of the nature of an experiment, I also bid a cordial welcome. You may perhaps be not entirely free from certain doubts and misgivings. You are in a way entering upon a new period, more markedly, perhaps, in some cases than in others, for some of you have left home and home influences

for the first time, at least for a protracted stay, and, thrown upon your own resources, amidst strangers perchance, there may come to you a feeling of isolation which may lead to a sort of helplessness. If such should be the case, you will do well to combat the feeling by cultivating the acquaintance of those who are engaged with you in a common pursuit, and by devoting yourselves assiduously to your legitimate work here rather than in seeking diversion in outside amusements. Keep ever clearly in mind the reason why you are here. Is it not to get all that you possibly can out of your course? If you are not ready to answer this question instantly and emphatically in the affirmative, then it certainly behooves you to ask yourself in all honesty,—what purpose brings me here? Is it for relaxation from the work in which you have been engaged; for change of scene and a wider companionship; for the pleasures and social advantages of city life as contrasted with that of some smaller place? If need there be, I beg you to take an account of your mental stock now, that you may know whether any of these less admirable motives have influenced you, because unless you do this it may chance that you will waste much valuable time and dissipate your energies in a listless and perfunctory performance of your duties here. “Waste not your hour!” Have purpose and method. Set high your standard and have some ideal which is worth striving to attain, and then, with firm resolve and a true devotion to your work, see to it that no allurements draw you away from the course which you have laid out on your chart and resolved to follow. It is the foolish, I had almost said criminal, waste of time and opportunity that hinders the progress of so many lives, and in some cases makes shipwreck of them. I firmly believe that the old-fashioned practice of writing down at times good resolutions was based upon a principle entirely correct, because unless a man comes to himself and says,—thus will I do and no otherwise, and holds to that resolve, there is little prospect that the goal he may have set for himself will ever be reached. For geniuses there may be some other and easier way to secure results than by “persistent” work, but for the most of us there is none other, and the longer we put off the beginning the less likely we are to enter upon it, and so I say again to those of you who are this evening formally entering upon a new course of study, make up your minds *now* to put into it your best efforts and to

get out of it all that you possibly can. If you do this you will find others willing, yes anxious, to help you, and you will finish with satisfaction a course which you have thus auspiciously begun. I cannot emphasize the fact that this is your seed-time, and that your harvest will depend upon the present sowing, without indulging in the veriest commonplaces, and yet I feel that I should, in a sense, evade a responsibility that rests upon me, who have seen so many men throw away time and opportunity, did I not charge you to remember that the work you do now determines the amount of capital which will be at your disposal hereafter. Look then to your present accumulations if you expect them to yield profitable future interest.

Just twenty years ago on the third of this month, this school threw open its doors for the reception of its first class. A long time you say. Yes, as long a time as many of you have lived, but seemingly short to some of us in the retrospect. Proposals had been made looking toward the establishment of a school by the pharmacists of Albany and vicinity, but the project received little favorable consideration, and not until a few gentlemen who had taken up the matter determined that the best and only practicable method was to organize as part of Union University, in which departments of engineering, medicine, law and astronomy, already existed, was any real headway made. Dr. Eliphalet Nott Potter, who died last winter while visiting Mexico, was then president of the University, and the interest of Archibald McClure, Dr. Jacob S. Mosher and Joseph W. Russell, all of whom have passed away, having been secured, a plan of organization was drawn up and presented to Dr. Potter. Under the third section of the charter of Union University, being Chapter 193 of the Laws of 1873, the Board of Governors of the University is given "power to establish such departments of science and learning in or in connection with said university as they may deem proper." It was seen that this rendered possible the founding of such a school under the most favorable auspices and without the necessity of special legislation or other consent. Dr. Potter cordially approved the proposal and the plans were perfected and laid before the Governors of the University, which board, on June 21, 1881, took the desired action, and, on August 27, the school was duly incorporated, under the general laws of the State, as the Albany College of Pharmacy. By these acts a board

of trustees with proper officers had been created and a faculty was immediately appointed, a seal adopted and other formalities complied with. The faculty of the Albany Medical College very generously gave permission to the new school to occupy one of its lecture rooms and make use of its chemical laboratory, apparatus and collections, and here we have since remained, though carrying on part of our work elsewhere during recent years. And this arrangement which has been very helpful to the school has been of indirect advantage to the medical college also, since it gives opportunity for students of medicine to obtain instruction in subjects related to the medical course with little trouble and at no expense, as well as admirable opportunity for students of pharmacy to obtain instruction in departments helpful to them under similar conditions. Occasionally students have carried on work in both departments at the same time, this being entirely practicable during one year of the course at least, and many graduates of the school of pharmacy have subsequently taken up the study of medicine. I am aware that there is a feeling on the part of some that the time has come when we should be housed under a roof of our own, and I look forward hopefully to the time, in the not-far distant future I trust, when this wish may be realized, in part at least, for my desire is that when a new building is erected for the medical school it may include distinct quarters for the school of pharmacy. But I am very sure that the conditions which have existed in the past have been eminently favorable to the progress of the school and have, in every way, been advantageous to us. This is an old building, but it is hallowed by many associations, and it has furnished a place appropriate and convenient for our occupancy. Though by no means modern it has been well adapted to our needs, and it has lent dignity to a school which, had it started in some loft of a building rented for the purpose, would have begun its course under much less favorable auspices. And so I think we have right to congratulate ourselves, that, entering upon our work without endowment and with no aid asked or given by profession, state or public, we have been able to carry on this work with reasonable satisfaction and a good degree of success. Schools of pharmacy need no very large buildings nor costly equipment. Much of their work is necessarily done by lectures and recitations, and if they possess fair laboratory facilities in chemistry and pharmacy and for micro-

scopical work, the essentials are at hand, and showy buildings, large libraries and extensive collections are not indispensable although they may be useful. On former occasions and similar to this I have emphasized the fact, recognized by every educator and intelligent student, that the externals, the material equipment and pedagogical paraphernalia, must not be valued too high, since knowledge cannot be absorbed from piles of brick or stone, nor myriad books, nor costly instruments, but must be sought for and acquired by personal endeavor. I would not be misunderstood nor have it thought that I intend even remotely to imply that great institutions, liberally endowed and amply supplied, do not afford certain students advantages which smaller institutions cannot provide, but we should never forget that the larger part of the education which most men acquire in school and college and university, is not mechanical, requiring tools, but is a storing of the mind, and a cultivation of the intellect, and a disciplining of the passions and desires, and that these are ends which may be attained with very simple external aids. Daniel Webster has well said: "Costly apparatus and splendid cabinets have no magical power to make scholars. In all circumstances, as a man is, under God, the master of his own fortune, so he is the maker of his own mind. The Creator has so constituted the human intellect that it can only grow by its own action; and by its own action and free will it will certainly and necessarily grow. Every man must therefore educate himself. His book and teacher are but helps; the work is his." And we should not lose sight of the fact that much original investigation and research work has been done in the past, and is being done to-day, with comparatively simple tools. In the science of chemistry for example, I need not for illustration go back to the times of Priestley, Davy or Lavoisier, whose apparatus seems to us so rude that, as we view it in museums, we are filled with surprise that with tools so poor such great results could be obtained, but may instance the laboratory of Bunsen at Heidelberg as it existed during his most productive period. It possessed few of the fittings deemed all but essential now, and little elaborate apparatus such as has recently been devised, but workshops like this have given to the world discoveries which have been of fundamental importance. One of the chemical laboratories in this country from which issues much of the best original work is but a cramped and homely

place when compared with others of later construction and of greater cost, and when I take such facts into consideration I am inclined to view with less enthusiasm than do some the enormous gifts that during recent years have been showered upon certain great institutions. I can conceive of ways in which such vast sums might be utilized in advancing knowledge, and extending it, but do not observe that in practice the results actually obtained are fairly proportional to their cost. Educational trusts and monopolies may be more than a fiction, and when we consider the paralyzing influence that great organizations, whether industrial or educational, have upon smaller ones, and the American tendency to overvalue mere bigness and underrate small undertakings, we need not hesitate through fear of being called jealously minded to raise the question whether gifts of millions to institutions already great will increase their efficiency and result in a real gain. A leading weekly, in commenting upon some recent endowments, said a few weeks since: "It now remains to be seen whether the quality of instruction in our colleges will keep pace with the great gifts from wealthy men; it must never be forgotten that men, not money, make a university great." I am quite sure that the effect of these enormous gifts would be to drive many of the smaller colleges out of existence were it not that in most instances the cost of an education is greatest in the largest institutions. Enormous real-estate holdings, complicated machinery and the resulting expensive administration of these great trusts too often results in this,—that the advantages offered are hardly to be secured save by the rich. Great benefactions have not generally lessened the cost of obtaining an education. The most liberally endowed of our Eastern universities, and doubtless the richest of all our colleges, is confessedly the most expensive. With grounds and buildings valued at six millions, and productive funds amounting to nearly twelve millions of dollars, as reported to the U. S. Commissioner of Education, the average annual cost to the student is given in a carefully-prepared comparative statement recently published at one thousand dollars, as against two hundred and fifty to eight hundred and twenty-nine dollars in our other colleges. And it is an interesting fact, startling in its suggestiveness, to which attention has very recently been called, that the receipts of this college from tuition fees form only about one-third its total income, so that those who,

in most instances, have little need of the aid really receive endowment advantages estimated at three hundred and twenty-two dollars to each pupil annually. Truly "he that hath, to him shall be given." That opportunities exist by which the brilliant student, though poor, may secure an education at the larger and richer colleges is not to be denied, but we should not lose sight of the greater number of men of ordinary and average ability who have right to, and greater need for, the same advantages. Such advantages in these institutions they may not easily obtain, and so there will probably for many years to come exist a need for the small schools, and they will continue to fill a place and hold their own for a time, but I am fully persuaded that the tendency is in the direction that I have indicated, and that is toward combination and centralization and the expansion of the great and the extinction of the little. But we may hope that so long as there are those who are not dazzled by size nor influenced without reason by mere majorities, and those who, through lack of means or inclination, are unable or unwilling to seek great centers, there will be need for the smaller schools which bring educational advantages within the reach of many who could not otherwise obtain them.

One other word before leaving this subject. The great centers of population and of commercial activity are not necessarily the best locations for educational institutions, and the tendency to exploit them as such is to be deplored. Very recently we have seen it stated in press dispatches that the president and trustees of a great theological seminary, located in the central part of this State, were considering the matter of its removal to New York city, and the president of the seminary has been quoted as saying that "the modern tendencies toward great cities compel institutions of learning to seek large centers." It would be well if, instead of encouraging such a tendency, those in control of these institutions would oppose it in so far as it is unreasonable. Much was said a few years since about Boston ceasing to be, and New York coming to be, the literary metropolis of America, as if the removal of printing establishments or the formation of publishing syndicates had any real relation to literary development. It is not a sufficient answer to say that where the greatest population is there must be the greatest number of trained men fit to be teachers and leaders of others, for this by no means follows,

and I need not point out that the great centers of population have not generally been the real centers of literary activity, of art and science and literature, and that they are for many reasons unsuitable sites for institutions of learning.

When the Albany College of Pharmacy was organized there were, according to the report of the U. S. Commissioner of Education, but thirteen regular pharmaceutical schools in this country, those in Philadelphia and New York being the oldest, and the others situated in Boston, Chicago, St. Louis, Louisville, San Francisco, Pittsburgh, Baltimore, Cincinnati, Washington, and at the University of Michigan and the Vanderbilt University at Nashville. Although managed by boards of trustees, or having in some instances university connections, these schools were for the most part and to all intents and purposes private institutions, and the courses offered were neither thorough nor lengthy. The aim in most cases was to give instruction, chiefly by didactic lectures delivered in the evening, but with a limited amount of laboratory work, and at hours so chosen as not to interfere with services rendered in stores, since the greater part of the students came from the immediate locality in which the school was situated and devoted most of their time to practical pharmaceutical work. It need scarcely be said that this method was by no means the best conceivable, for, while pharmacy must of necessity be largely learned by an actual apprenticeship, yet the method described afforded the student but little time for study, and while the instruction, so far as it went, was often excellent, the average student derived little benefit from attendance upon an evening lecture after a long day's work in a store. During the first course given in this school attendance upon three lectures only each week was required with two or three hours of work in the chemical laboratory; but times have changed and, while the courses at present pursued in most of the schools are by no means either so long or so thorough as might be desired, there has been great improvement in them, and every year is marked by an advance. The majority of students no longer serve as clerks while they are pursuing their course, and the work in this school has been quadrupled and a month added to the length of the term since its first course was given. Students have now abundant time for study in most cases and their work is more systematic and thorough than formerly. It cannot be expected, under the conditions

which govern the profession of pharmacy, and which we shall not stop now to describe, that education in this branch shall be as thorough and the curriculum as extended as in many other departments of science, and I am inclined to think that the courses given in our schools of pharmacy to-day are as satisfactory on the whole as might with reason be expected. There is improvement to be observed everywhere and the schools are probably advancing quite as rapidly as the demands made upon them, and existing conditions, warrant. It is a useless and a thankless task to prescribe ideal conditions and find fault with an educational system because they are not instituted. If there is improvement and development, and adaptation of means to needs, we have cause for satisfaction since perfection can never be attained.

President Potter, Dr. Mosher, Mr. Russell and Mr. McClure have been mentioned as being among those who took an active part in organizing this school, and they, together with Louis Sautter, Luther H. Tucker, Charles Newman, Addison A. Keyes, Edward P. Waterbury and Dr. Alfred B. Huested, constituted the first board of trustees, and of these but two are living to-day and they are still connected with the school. The first faculty was made up of Dr. Jacob S. Mosher, professor of botany and materia medica, and Professor Michaelis and myself in our present chairs. Before the opening of the third session Dr. Mosher died. As professor of chemistry and registrar, and afterward as professor of theory and practice of medicine, Dr. Mosher had been connected with the Medical College for many years, and as one of the founders of the College of Pharmacy, he had displayed the keenest interest in its welfare. He was a man of brilliant intellect and winning personality, and his sudden and untimely death was an irreparable loss to this and to every institution with which he was connected. To his place Dr. Huested was appointed and the faculty, originally consisting of but three members, has since been enlarged by the addition of various lecturers and instructors. During our first session we had twenty-one students in attendance and at its close graduated three of them who were entitled to this honor.* The commencement

*The members of the first class graduated were Albert R. Griffith, of New York and Oil City, Pa., a life-long friend of the college; John S. Phillips, of Gloversville, graduated in medicine from the Albany Medical College in 1887, and Gustave Kreutzer, long a practicing pharmacist in Brooklyn. Mr. Griffith and Dr. Phillips died several years since, and Mr. Kreutzer died in August of the present year.

exercises were held on the evening of February 28, 1882, in the amphitheatre of this building, and the address was delivered by Dr. David Murray, then secretary of the Board of Regents, who had taken a deep interest in the organization of the school, and whose scholarly oration on this occasion will be remembered by some who are present this evening. At the close of these exercises the faculty, trustees, graduates and many of the students participated in a dinner, and it was on this occasion that the project of establishing an alumni association was referred to as something to be considered in the future. With only a handful of graduates, such an association was actually organized the succeeding year, and it has been successfully maintained and proved a great source of strength to the school to this day. I have always been a firm believer in the helpfulness of alumni associations, and I think that the first suggestion of organization in this direction came from me. A loyal body of alumni, well bound together in a live association, is a tower of strength to an institution. They naturally have a pride in their alma mater and desire her success because the fairer her reputation the more valuable the warrant that they have received from her, and so, if the management of a school is disposed, as it should be, to be influenced by the advice of its alumni, and they in turn are disposed, as generally is the case, unselfishly to promote its interests, the relation is one which is very certain to inure to the benefit of the school. And that this relation may be the more vital and effective it seems to me eminently proper that such body should have a representative, or representatives, upon the board of trustees, and I should be very glad if, in our case, such an arrangement could be effected. At the present time our alumni are, as a matter of fact, well represented in the management of the school, for one of them is its secretary and instructor as well; another serves upon the faculty as lecturer, and another as an instructor, and of the Board of Examiners two of the three members are alumni of the school.

I have said that not only has our session been lengthened, but that the amount of required work has been increased fourfold since our first course was given. Regularly conducted recitations are now held in all departments in which didactic lectures are delivered and laboratory courses in chemistry, microscopy and pharmacy constitute a very essential part of the course. Our pharmaceutical laboratory was first opened in 1890, and since that

time has been twice moved to more convenient and commodious quarters. I do not desire to weary you with statistics, but may say that the growth of the school, while not phenomenal, has been constant and satisfactory. The first year we had twenty-one students; at the end of the fifth year we had forty-nine; at the end of the tenth, fifty-six; at the end of the fifteenth, sixty, and last year, seventy-three. Our graduating classes have varied from three the first year, to thirty-five in 1900, with an average of seventeen and a total of 352, and among these have been several women, and I take great pleasure and satisfaction in saying that their number has included some of the brightest pupils and best that have ever honored the school by their presence. The occupation which these young women have chosen is one to which they are by nature well adapted and which offers to them reasonable prospects of advancement. New avenues of employment are opening to women daily, and they lead in all directions, and I am sometimes surprised that a larger number do not devote themselves to pharmacy and to scientific work of like nature in other directions. Women frequently excel men in neatness, orderliness, accuracy, nicety, and fidelity to small but essential duties, and these characteristics are such as fit them in an eminent degree for pharmaceutical and chemical work. Several women have made notable successes in these directions and there is opportunity for a much larger number than seem to be disposed to avail themselves of it.

We have seen that there were but thirteen schools of pharmacy in this country twenty years ago. In 1899 there were no less than fifty-one, and the fact well illustrates the rapid advances which pharmaceutical education has been making. I think that every State in the Union now has a Board of Pharmacy, or a pharmacy law of some kind in operation, so that there is in all of them some regulation of its practice, and, although in most of the States evidence of graduation from a college of pharmacy is not required as an essential for license, the information necessary to pass the State examination is best acquired at such institutions. State regulation raises the standard of attainment and creates a demand for schools. To what extent the school should be under State supervision is a matter upon which much difference of opinion exists, but very certainly when the time comes, as I believe it will in this State before very long, that graduation from a school of

pharmacy shall be required of licentiates, as has been the case for years in medicine, it will be both natural and entirely proper for the State to require the schools to maintain a certain and uniform standard of efficiency. I am not prepared to say that this time has come as yet and when, a few years since, it was proposed to put the degree of Ph. G. on the same plane in this State as other degrees protected by the Regents of the University, and to require the same preliminary education as a requisite for entering upon the study of pharmacy that is required of students of medicine, and a four-year course of all candidates for diploma or degree, the schools of this State without exception opposed the measure. They did so on the general ground that the proposed action was in advance of any real necessities in the case then existing ; that it would cripple or destroy the colleges ; would drive students from this to other States, and would result in no advantage to the State nor betterment of its educational system. And the board listened to our remonstrance, and after due consideration withdrew the proposed ordinances and left the degree of Graduate in Pharmacy among the unregistered or unprotected degrees. Indeed the University does not regard it as a degree at all and this is as it should be under present conditions. Pharmacy still occupies a place which is intermediate between ordinary business callings and professional occupations, and so long as this continues to be the case it will be as unwise and unjust to restrict its practice to those who have pursued the equivalent of a full professional course as to leave it entirely unregulated. The diploma of a school of pharmacy is evidence of attendance upon a certain course of instruction, but in most localities it conveys no privileges and has no legal significance. It therefore needs no state protection, nor do the schools ask for such, but, in the future, should the possession of a diploma be required by law of those who seek to be licensed as dispensing pharmacists, it would be entirely proper, as has been said, for the State to exercise some supervision over the schools and to regulate the conferring of degrees. But even in such a case it is evident that the same standard should not be required as in such a profession as medicine, nor so much of preliminary training demanded, nor so long a course of study prescribed. Too much state regulation may be mischievous and work hardship, and the result of enacting measures which are in advance of the real needs of the people is

to cumber our statute books with laws which are either evaded in some way or not enforced. Ultra-reformers, visionary enthusiasts and theorists favor many such measures which more conservative and reasonable people, equally sincere and intelligent, with better judgment condemn.

Two men have recently died whose useful lives were devoted to the profession which you have chosen, and to the records they have made we may well point, for they furnish ideals which you, as young men scarce entered yet upon the calling you have chosen, may well select as incentives. I refer to Dr. Edward Robinson Squibb and Dr. Charles Rice. These men, whose names are as household words in pharmacy, had from one point of view little resemblance. Dr. Squibb was an American and Dr. Rice of German birth; the one lived to old age; the other died while still in his prime, and in personal appearance and habits they had little or nothing in common, but they were one in their love of truth, devotion to science, natural ability and capacity for hard work, unflagging industry and unflinching honesty. In their zeal for knowledge; in their love of truth for truth's sake; in their allegiance to things honest and of good report, and in their devotion to duty as they saw it, they lived lives of such usefulness and beauty that they may well serve as models for the guidance of those who seek to follow where such as these have led. Time fails me to say anything that is adequate of these men, but you may read of them elsewhere and cannot do so but with advantage. Dr. Squibb died in October, and Dr. Rice in May. In a paper read before the American Chemical Society, the latter concluded his estimate of Dr. Squibb as follows: "The most characteristic traits of his character, from a professional standpoint, were his extraordinary powers of critical and patient observation; his logical reasoning and, in consequence thereof, a remarkable adherence to the deductions derived therefrom; an unselfish liberality, shown by sharing the results of his researches with others, and an uncompromising stand for what he considered to be ethical and just." Dr. Rice was a man of the broadest scholarship and the greatest versatility, using that word in the best sense and as meaning the faculty of easily turning the mind to new tasks or subjects. He was a proficient mathematician and a philologist of rare ability, esteemed to be one of the foremost Sanscrit scholars in this country. He had a natural genius, you say. Yes, but it

was trained and put to the best uses and, like most men of real ability and productiveness, he had a passion for details. His friends thought that he expended his energy upon minutiae which might well have been left to his assistants, but I think that this is a characteristic which is common to most men who accomplish much, perhaps not to all whom we call geniuses. A friend has testified that it was his custom in his laboratory at Bellevue Hospital "even to write the labels for containers for which a printed label was not provided, and his penmanship was but a reflex of the studied care he gave to every detail of work or duty, for it was in characters so plain that he who ran might read." And I want to say in this connection, and for the possible benefit of some one who may profit by the suggestion, that when such men as this can afford to give time and painstaking care to matters of small detail, it ill becomes those who have abundant time at their disposal, and a reputation still to make and a character to establish, to neglect them as if unworthy of their attention.

I began with some general advice and find myself closing in a similar vein. This is not unnatural. I have watched the members of twenty classes from the day they entered the school until they left it, or went out from it with its diploma, and I have seen the faults in early training, or resulting from lack of training, and the bad habits and other limitations which have hindered some of these and lessened their accomplishments. If one is a fatalist, then these things had to be; if a pessimist, then no word of counsel or advice would have been effectual and they had better not have been spoken. But I am neither and am therefore minded, in conclusion, to say a word or two of admonition and of advice, and more particularly to those who are just entering upon their course.

It is fortunate if such can, at the outset, recognize their deficiencies. The field of knowledge has no limits, and we know how hopeless would be the task should we attempt to explore more than a small part of it, but we also know, or ought to know, that different things have different values for us, and that it is essential for us to know some things; desirable for us to know others; and much less important for us to have any knowledge at all of many others. Our entrance requirements are not such as enable us to ascertain with any certainty the extent of your preliminary training, so that you yourselves know much better

than we do in what respects it may have been deficient. It may not be a matter of great moment whether your knowledge of history and general literature, of dead languages and philosophical subjects, is profound, but if you cannot speak and write English correctly and fluently; if your spelling is faulty, your pronunciation slovenly and your handwriting poor; if you cannot perform ordinary arithmetical calculations with accuracy and rapidity; if your geographical knowledge is vague and you have no smattering of Latin, or of any modern language but your own, you are seriously handicapped, and the sooner you make up these deficiencies the better. "If we know our weakness," says Ruskin, "it becomes our strength." No man need be discouraged because he has lacked early advantages and opportunities. He only is to be pitied who, being ignorant, fails to appreciate the fact or has no wish to alter it. I assume that you have come here to work and that I need not urge upon you the necessity for unremitting toil. Perhaps the habit does not come naturally to us all and needs to be cultivated in some cases, and it is a fortunate fact that the habit of working begets a love for work as the habit of dawdling begets laziness. Lay out your time, then, systematically, and while you allot a certain proportion of it to rest and recreation, see to it that the best part of your waking hours are profitably spent. You will need to school yourself rigorously perhaps because it is so easy to let things go, idly postponing until to-morrow the things that we ought to accomplish to-day. A systematic division of your time, each hour having its appointed task, is indispensable if you hope to accomplish much, and pleasure should not be allowed to interfere with the regular discharge of these self-appointed tasks. Above all, cultivate the habit of accuracy and punctuality in its broadest sense. The study of the natural sciences, and especially of such sciences as chemistry, is very helpful in this respect. The exact sciences are based upon facts established with the utmost possible precision and as we study such sciences we acquire a new and larger respect for truth because we appreciate its necessity, and we thus come to look with disgust upon careless observations and inexact reports, illegitimate inferences and hasty generalizations. Be very sure that in such a profession as that which you have chosen precision is of utmost importance and carelessness in performance and inaccuracy in mat-

ters of detail are subversive of the very ends and design of all scientific work.

But I have detained you too long. We trust that the course upon which you are entering will prove a profitable one to you all, and we bid you a hearty welcome.

A SMALLPOX EPIDEMIC IN AN¹ ORPHANAGE.*

By F. C. CURTIS, M. D.,

Professor of Dermatology, Albany Medical College,

AND

HENRY L. K. SHAW, M. D.,

Instructor in Diseases of Children, Albany Medical College.

A type of smallpox of almost universal prevalence commenced in 1898 and being generally abnormal by reason of its mildness brought forth many expressions of doubt as to its true variola character. Clinical observations of this anomalous type of the disease are therefore eminently desirable. The epidemic we have to report illustrates so very well the most extreme possible variations from the normal, together with undoubted proof of its variolous nature, that it constitutes a distinct contribution to this study.

The outbreak occurred in the Lathrop Memorial, Albany, a branch of the larger Albany Orphan Asylum, sheltering from forty to fifty small children. Smallpox was at the time prevalent in the city but a direct contagion to the first case in the orphanage could not be traced. This case occurred on March 17, 1900, in a child who was not seen by a physician nor isolated as the matron regarded the eruption as that of chickenpox. Between March 31 and April 4 forty-seven cases developed, seventeen of them being taken almost simultaneously on April 1. The onset was invariably sudden and was attended in the severer cases by vomiting, nausea, restlessness, pains in head and back and high fever. The eruption generally put in an appearance on the third day and with it came an abatement of all the symptoms.

The history of one of the severe cases and of the mildest case among the children will give some idea of the clinical picture seen in this epidemic.

*Read at the semi-annual meeting of the Medical Society of the State of New York, New York City, October 16, 1901.

Bertram B., colored, age seven, was taken ill on April 1 with severe vomiting. The temperature was 105°F. , and the child seemed very sick. The vomiting, temperature and prostration continued until April 3, when the rash appeared on the face and hands. A note made on April 7 reads that the eruption is abundant and close set on the face, arms and hands and a number of lesions appear on the palms and soles. On the back particularly but less on front of trunk are turbid full rounded vesicles on hardened bases. The child seems ill and depressed and shrinks from pressure on lesions. Temperature 98.5°F. April 8: The lesions are fuller and larger; the child complains more of pain and cries when touched or moved; there is very slight tendency to scratch lesions; temperature 101.2°F. April 10: Arms and legs show typical smallpox; the lesions on the face are aborted and are drying; the eruption is sparse on the chest and trunk but the face, arms and legs are covered; several of the spots have coalesced on the arms and legs making a few lesions about the size of a ten cent piece. April 15: The child is dressed and appears perfectly well; the eruption is drying and the scabs are falling off. The child was vaccinated on April 7 during the height of the disease with no effect.

The lightest case was that of John C., age eight. He had had chicken pox the year before and a few pock marks were visible on the face. He appeared somewhat drowsy and stupid on the 4th of April but did not vomit or complain of pain. There was no rise of temperature. Two days later three spots appeared. One was on the forehead, one on the back of the left hand and one on the right thigh. This child was not confined in bed and appeared perfectly well. Vaccination on April 9 was negative.

The youngest case occurred in an infant two years old who had had chickenpox but who had never been vaccinated. This child had mingled freely with the rest. She had no noticeable preliminary fever which is very remarkable and her only symptoms were the cutaneous lesions which appeared at the same time as the others.

In forty cases of moderate severity the onset was sudden and was accompanied in nearly every instance with vomiting and more or less fever. These children were not sick enough

to remain in bed but were sluggish, drowsy and disinclined to play. The temperature rose to 102°F. and over in seventy per cent. of these cases during the first twenty-four hours but it generally fell the next day to a degree or two above normal and disappeared on the third day when in the great majority of cases the rash first appeared.

The skin lesions. These appeared on the third day, counting from the onset of initial fever which was generally abrupt and severe though lasting sometimes only a day and always abating with the appearance of the eruption. As to location, it was generally that of smallpox, most abundant on the face, forearm, upper dorsum, very often on the palms and soles, the scalp and fauces, but seldom on the abdomen and legs. The number of lesions varied from three to a sparse, scattered eruption on the sites of election. The character of the lesions on April 7, which was the second to fourth day of eruption in a considerable number, was chiefly that of a vesicle varying in size from a pin head to half a split pea, though all lesions seemed of the same age and not coming in crops. The papular quality of these vesicles, that is showing hardness to the touch, was very ill defined though generally to some degree appreciable, never characteristically, and often very slight indeed. Some lesions were simply small macules with a papular quality which never advanced to the stage of a vesicle. The further evolution of these lesions, with the exception of two children, consisted in the drying down of the vesicles, the persistence of a certain induration and stain, which latter continued for three weeks or more in the better marked cases. Two children and two adults only had characteristic lesions and a typical course of moderately severe smallpox. They had fairly severe fever, an eruption close set on the face, forearm, palms and soles, with full rounded, pea-sized vesicles on hardened base, becoming pustular and running a fairly typical course.

The diagnosis from the lesions alone could hardly have been made in the forty-two cases of mildest expression of the disease. It would rest on the judgment as to the value of the papular quality of the lesions and the election of site. It is the rarest thing for varicella lesions to show on the palms. The character of the onset of the initial fever and

the third day appearance of the lesions would justify the diagnosis of the majority of them.

Vaccination. Of the forty-five children in the institution only one had been vaccinated, and that one alone failed to take the disease. Of nine adults, six had been vaccinated and did not contract the disease. Three had never been vaccinated, one of whom was successfully vaccinated when first exposed and did not contract smallpox, and two had the disease, in one of whom it ran a severe course. Several of the adults had only been vaccinated once and then in early childhood so that infancy vaccination afforded sufficient protection. All the children were vaccinated during their sickness and some a second time on recovery but the result was negative in every instance. The virus used was from a lot which produced ninety-five per cent. of successful vaccinations in the larger orphanage.

A point having diagnostic value is that a pretty general epidemic of varicella occurred the year before among these children leaving scars in several of the cases.

There were no deaths, complications or sequelae and in only one case were any scars left.

The question naturally arises if this is an intermediate disease like roetheln or the proposed "fourth" disease, as has sometimes been advocated. We think that it is unnecessary and unsafe to allow this. While it largely follows a type *sui generis*, its characteristics are essentially those of variola, abortive in character and mild but with true unmodified variola occasionally appearing among the mild forms.

The proof is unquestionable that the epidemic was one of smallpox and unmodified by vaccination. The protective value of vaccination is conclusive as to its nature. Further proof is that of severity of onset, following an incubation period from the onset of the first case of fourteen to eighteen days; an initial fever of three days; defervescence of symptoms when the eruption appeared; the essential nature of the lesions and the fact that every unvaccinated person contracted the disease and no vaccinated person took it.

The interest lies in the abnormality of this extensive and easily observed outbreak of smallpox by reason of its general extraordinary mildness.

Clinical and Pathological Notes

*A Case of Nutmeg Poisoning.** By E. E. HINMAN, M. D.

Mrs. A., aged 36, sent for me hurriedly about seven o'clock on the evening of April 5, 1901. On reaching the house I found the patient in bed and in a condition bordering on syncope. She was extremely pallid, the pulse was 150, feeble and irregular; the pupils were about three-quarters dilated and refusing to respond to light or accommodation; respirations about 23 and shallow. She complained of an intense dryness of the mouth and throat, a feeling of constriction, amounting almost to pain, across the frontal region, vertigo on the least exertion and numbness of the legs and hands.

All objects appeared to be very distant and as she looked at those near by they quickly receded. Objects in the left half of the field of vision appeared to be a chocolate brown color, while those on the opposite side were normal in color. Sounds also were all apparently distant. She was too weak to turn in bed and when she was raised everything became black before her eyes. The most peculiar symptom present was a tendency to pass into a dreamy sleep with the eyes wide open. Even while talking she would suddenly stop speaking for a moment or two and lie perfectly still, looking directly at me, winking occasionally, and then resume her conversation remarking that she had been asleep and had been dreaming of doing various things.

Inquiry revealed the fact that during the forenoon of that day she had eaten four or five whole nutmegs, of which she was very fond, and had frequently eaten half of one for a number of years. As these four or five were pithy she thought they were harmless. She was greatly debilitated, mentally and physically, from overwork and nervous strain during a few weeks prior to this and had not menstruated for two months. During the afternoon she had felt very queerly, weak, giddy and hardly able to walk, but attributed it to overwork and tried to fight it off.

*Read before the Medical Society of the County of Albany, November 13, 1901.

Inasmuch as the last nutmeg had been eaten six hours prior to my seeing her no emetic was administered, but an ounce and a half of castor oil was given her at once with hot milk. One tablet of Gordinier's heart tonic and whiskey, two drachms, were administered every half hour for three hours, and fifteen minims of aromatic spirits of ammonia every fifteen minutes for the same length of time. She was also given a pint of hot black coffee. By midnight she was decidedly better in every way and the stimulants were continued the rest of the night and for several days at gradually lengthened intervals. For two days she passed large quantities of urine. The patient made a good recovery and has not noticed any after effects of the drug.

The literature on this subject is very meagre, there being but nine cases recorded in the *Index Medicus* and the *Bibliographia Medica*:

PINNOCK. *Australasian Medical Gazette*, Sydney, 1886, Vol. VI.

DODGE. *Medical Record*, New York, 1887, Vol. XXXII.

SAWYER. *New York Medical Journal*, 1889, Vol. L.

BENTLIFF. *British Medical Journal*, London, 1889, Vol. II.

READING. *Therapeutic Gazette*, Detroit, 1892, Vol. VIII.

SIMPSON. *Lancet*, London, 1895, Vol. I.

HODGON. *American Medico-Surgical Bulletin*, New York, 1894, Vol. VII.

F———. *Guy's Hospital Gazette*, London, 1898, Vol. XII.

GILLESPIE. *Philadelphia Medical Times*, Vol. XVII.

In all of the above cases there was prostration with partial or complete coma. Most of them had vertigo, delirium, chiefly hallucinations of sight, rapid, feeble pulse and free urination. In five instances the nutmegs were taken to produce abortion and in every case without accomplishing the desired result. All reporters agree on a stimulating treatment following a thorough cleansing of the gastro-intestinal tract. Where deep coma does not supervene the prognosis is good under prompt treatment.

Editorial

"Mesmer is still here, and has still some adherents and some practice. It is surprising how much credulity still subsists in the world. I suppose all the physicians in France put together have not made so much money, during the time he has been here, as he alone has done. And we now have a fresh folly. A magnetizer pretends that he can, by establishing what is called a *rapport* between any person and a *somnambule*, put it in the power of that person to direct the actions of the *somnambule*, by a simple strong volition only, without speaking or making any signs; and many people daily flock to see this strange operation."

BENJAMIN FRANKLIN.

The Life of Benjamin Franklin, p. 504
By Jared Sparks

The Albany Guild for the Care of the Sick Poor.—Special Obstetrical Department

The Special Obstetrical Department of the Guild was organized experimentally in co-operation with the Albany Medical College, members of the faculty having long felt the need for some arrangement by which the senior students could have the benefit of practical work in obstetrics. A letter from the lecturer on obstetrics, bearing date September 17, 1900, was sent to the President of the Guild, stating the need for such work, outlining a plan for organization, and formally asking the Guild to take charge of such a department. A copy of this letter was sent to each member of the Advisory Board and of the Executive Committee before the formal call for the meeting on October 2, 1900. At that meeting the question was discussed in all its bearings; on one side the undoubted advantage to students of having theoretical knowledge supplemented by practical experience; on the other side the opportunity given for women unable to pay for such service to obtain the attention of specialists and the care of a professional nurse. It was decided that it would be wise to undertake the department for a year, experimentally incurring as little expense as possible on the part of the Guild. The recommendation of the Advisory Board and the Executive Committee was reported at the monthly meeting of the Board of Managers on October 3, 1900, and then approved and adopted.

A meeting of the Executive Committee was held on Octo-

ber 6, 1900, to consider the organization of the department and to appoint the staff of physicians. The President submitted correspondence with the Registrar of the Albany Medical College, giving the endorsement of the faculty and assurance of interest and co-operation. The question of sending circular letters to physicians announcing the new department was decided in the negative, except in the case of the Health Physicians who might wish to be relieved from this branch of work among the poor.

At the meeting of the Advisory Board and the Executive Committee held in October of this year one of the topics for discussion was the advisability of making this department a permanent division of the Guild work. Reports prepared by the obstetrician in charge and by the head nurse of the Guild were submitted. These reports showed the advantage to women having such care and supervision, the ability of students in the senior class to take charge of normal cases, and the value to the students of such experience. The statistics for the year gave sixteen cases, seven of which were abnormal, and two patients still under observation. The number of visits by the obstetrician in charge was one hundred and five; by one of the assistant obstetricians, fourteen. The twenty-one students in attendance made ninety-one calls, and one hundred and eighty-seven visits were made by the nurses of the Guild. It was stated that for the first time in the history of the Albany Medical College it could be said that each senior had observed at least one case, while it was believed that in the course of another year the number of opportunities for practical work would be greatly increased. It was decided by a unanimous vote that the department should be continued. This decision was approved by the Board of Managers of the Guild at the monthly meeting held on November 6, this endorsement being followed by the reappointment of the following staff: consulting obstetricians, Dr. J. P. Boyd and Dr. G. E. Lochner; obstetrician in charge, Dr. H. Judson Lipes; assistant obstetricians, Dr. H. L. K. Shaw and Dr. E. A. Vander Veer.

All cases for this department should be referred directly to the obstetrician in charge, Dr. H. Judson Lipes, No. 1186 Broadway.

In Memoriam

WILLIAM H. SNYDER, M. D.

Dr. William H. Snyder, one of the oldest residents of the Iron Works district, Troy, died November 19, 1901. Feeble health and old age were the immediate causes. He was a familiar figure in the streets of the southern section of the city, and was known by every man, woman and child. The deceased was born in Greenbush, November 15, 1814. He graduated with the first class of the Albany Medical College in 1839. The death of Dr. Snyder leaves Dr. Rial Strickland, of Enfield, Conn., the only living graduate of that class, and in 1899 these two survivors planned to attend the sixtieth anniversary of their graduation, but were prevented by failing strength. Dr. Snyder first practiced medicine in small towns in Saratoga county and also in West Sandlake and Nassau. He settled in Troy in 1854 and has lived in Troy ever since. Besides following his profession, he at one time conducted a general store at the Iron Works. The deceased was an active member of Trojan lodge, I. O. O. F., since December 9, 1856. He served several terms in the board of school commissioners. His wife, who was formerly Catherine Uline, died about six years ago. The survivors are one daughter, Mrs. Emily S. Willets, and two sons, William A. Snyder, of Troy, and James E. Snyder, of Pittsfield, Mass.

Medical News

Edited by H. Judson Lipes, M. D.

MEDICAL SOCIETY OF THE COUNTY OF ALBANY.—A regular meeting of the Society was held November 13, 1901, in Alumni Hall. The meeting was called to order at 8:40 P. M., the President, Dr. William H. Murray, in the chair. The following members were present: Drs. Blumer, Bendell, Classen, Curtis, Davis, W. H. George, Goewey, Happel, Hinman, Hun, Jenkins, Lipes, Lochner, Lewi, MacFarlane, McCulloch, Mosher, Moore, Murray, Neuman, Rooney, Sautter, Shaw, C. H. Smith, Streeter, J. E. Smith, Tucker, E. A. Vander Veer, Ward, Wiltse.

1. *Reading of the minutes of the last meeting.*

Dr. BLUMER moved that the minutes as printed by the ALBANY MEDICAL ANNALS be adopted. The motion was seconded and carried.

2. *Minutes of special meetings.* There were none.

3. *Applications for membership.* The Secretary read the names of the following applicants for membership: Drs. HERBERT D. PEASE, ANNE T. BINGHAM and MARY F. SWEET.

The PRESIDENT referred the applications to the Board of Censors.

4. *Reports and resolutions.* None were presented.

5. *Special communications.* None were received.

6. *Reading of papers.*

Dr. MAURICE J. LEWI, of New York, read a paper on "Some Phases of Medical Legislation."

At the conclusion of Dr. Lewi's paper, the Hon. JAMES RUSSEL PARSONS, JR., secretary of the University of the State of New York, was invited to lead in the discussion.

Mr. Parsons said that progress toward restrictive professional legislation in this country had been incredibly rapid since 1870. Then the public had little protection from incompetency. The bar was at its lowest ebb. In those days as in Indiana now, whose constitution says that "every person of good moral character, being a voter, shall be entitled to practice law in all courts of justice," admission to the bar was practically unrestricted. At that time in several States only were there any laws designed to control the practice of pharmacy or dentistry. There was no law whatever restricting the practice of veterinary medicine.

In 1840 laws had been enacted in nearly all of the States to protect the people from the imposition of quacks. Between 1840 and 1850 such laws were either repealed or not enforced, as a result of the cry that restrictions against unlicensed practitioners were designed only to create a monopoly.

Conditions were not much better when, in 1888 as U. S. Consul in Germany, he was called upon to testify before the German courts touching the value of a Buchanan diploma. Then as we have often heard the terms "American doctor," "Philadelphia doctor," were synonymous throughout Europe for incompetency. The reputation of our leading physicians could not down the bogus American diplomas with which Europe was flooded.

At that time there was no effective law in any political division in the United States restricting the practice of medicine. To-day all our political divisions except Alaska and Kansas have medical examining and licensing boards. In New York the standard now compares favorably with that set by the most advanced foreign civilizations. It was a gratification to him, after the sting of the case before the German courts, so soon to be able to question the work of a certain German university, and to find that their standing with us was a matter of deep concern to them.

Now as to additional medical legislation. We need fear no longer the reaction which led between 1840 and 1850 to the repeal of professional laws. We had rushed to extremes like the Chinese Emperor, who decreed

that all history should begin with his administration, or the Georgia legislator of to-day, who would abolish all divorce for any cause at one fell swoop. If physicians are not divided as to what is needed, their wishes will be met. In this way nine of our political divisions have secured stringent laws against quacks and eleven fairly good laws regulating the practice of midwives.

There is strong need of moving cautiously whether it be toward a statutory definition of what constitutes the practice of medicine, or toward an act regulating the practice of the midwife. Nothing should be brought to the legislature hastily. All such legislation should first receive the approval of the three State medical societies concerned with the administration of the law.

The people of the State must be educated to realize that the duty of its government in relation to the health of the people does not consist in discriminating between schools or systems of medicine, but in requiring, without prejudice or partiality, of all who seek a license to practice for gain on the lives of fellow beings a minimum preliminary and professional training.

With such an education osteopathy would not have been recognized by law, as it is to-day in eight political divisions, nor would Christian Science and the various quackeries flourish, whether by direct statutory authority, as in Massachusetts, or without such authority, as in New York. All these "pathies" and "isms" seek short cuts to the profession and would disappear if the same minimum preliminary and professional training were required that is exacted of regular physicians,—that is, they would disappear as dangers; what is bad would be dropped and the good employed for the benefit of all.

Necessity for caution applies specially to attempts to regulate the practice of the midwife. Several years ago it seemed an easy matter to draft a bill that would be generally approved licensing midwives by special tests through the medical boards. The bill met with strong criticism from men who thought it would weaken the medical practice act. Now, they said "the especially incompetent or ignorant midwife may be prosecuted under the medical practice act; but if midwives are licensed it will be hard to secure convictions." This sounds well, but as a fact midwives are seldom molested whatever they do, and conditions will be unsatisfactory till their practice is regulated by statute. Mr. Parsons suggested that a bill be drafted after comparison with statutes in the eleven political divisions now exercising such control; that the bill be submitted to several prosecuting attorneys of active county medical societies that pay special attention to violations of the medical law; that it then be referred, with such changes as are thought best as a result of their suggestions, to the legislative committees of the State societies for their approval before introduction into the legislature. The New Jersey statute may serve as an illustration of my meaning. By way of showing how simple a matter this is, Mr. Parsons gave the provisions of the New Jersey statute, slightly modified to meet conditions in New York.

PRACTICE OF MIDWIFERY

Provisions of New Jersey statute, slightly modified to meet conditions in New York:

1. *Certificate necessary to practice.* After September 1, 1902, no person shall practice midwifery in any of its branches without a certificate from a State board of medical examiners, and registration with the clerk of the county as hereinafter provided.

2. *How person now practicing may obtain certificate.* Every person now practicing midwifery in this State shall, on or before July 1, 1902, personally present to a State board of medical examiners, or a duly-appointed committee thereof, an affidavit setting forth the name, nationality, age, authority, location and length of practice, together with a certificate of good moral character from some registered physician resident of the same district. On receiving from the State board of medical examiners, or its duly-appointed committee, an official recommendation, and on receipt of a fee of \$1, the regents shall issue a certificate under seal of the university entitling the person named therein to practice midwifery in this State.

3. *Persons beginning practice must take examination.* Every person beginning the practice of midwifery in this State after this act takes effect shall submit to such examinations in midwifery as the State boards of medical examiners shall require, and if such examination is satisfactory to the examiners the regents shall, on receipt of a fee of \$5 and a certificate of good moral character from some physician resident in the same district, issue a certificate under seal as provided in the preceding section. Examinations for these certificates shall be in accordance with the regents' rules for the medical licensing examinations and shall be exclusively in writing and in English.

4. *Filing of certificate.* Every certificate to practice midwifery shall, before the licensee begins practice thereunder, be registered in a book kept in the clerk's office of the county where such practice is to be carried on, with name, residence, place and date of birth, source, number and date of certificate. The licensee shall pay to the county clerk a total fee of twenty-five cents for such registration.

5. *Midwifery defined.* Any person shall be regarded as practicing midwifery within the meaning of this act who shall publicly profess by advertisement, sign, card or otherwise, to be a midwife, or who shall for a fee attend a woman in childbirth; but nothing in this act shall be construed to prohibit gratuitous service in case of emergency, nor to prevent licensed physicians from practicing obstetrics.

6. *Penalty for violation.* Any person practicing midwifery in this State without first complying with the provisions of this act shall be guilty of a misdemeanor and shall be punished by a fine of not less than \$40 or more than \$50, or by imprisonment in the county jail for not less than ten nor more than thirty days, or both in the discretion of the court.

Dr. WARD strongly approved of having midwives licensed. A part of

their education and of their qualifications should be to know when things are going wrong, and at those times to oblige them to send for a physician. He did not believe in the exaggerated obstetrical antisepsis as it was carried on fifteen to twenty years ago, and thought that much harm was done by the over-scientific zealots of that day. He felt that if people were assured that midwives thoroughly knew their business and would call in a physician when things went wrong more people would employ them. In other words such a license would result in benefitting the midwives. He urged that the bill proposed and read by Mr. Parsons be adopted. It covered the ground well and he approved of the suggestion to first submit it to the prosecuting attorneys of the county societies and then to the several State societies. He thought there was no doubt but that their legislature would do what the large majority of physicians recommended.

Dr. HERMON C. GORDINIER, of Troy, then read a paper on "Symptomatology of Thoracic Aneurism," with report of seven cases with autopsies.

Dr. E. E. HINMAN followed with a paper on "Clinical Aspects of Myristica Poisoning."

There was no discussion on the above papers.

Dr. WARD moved that a vote of thanks be tendered Mr. Parsons.

Dr. MACFARLANE amended this motion by including Drs. Lewi and Gordinier. Dr. Ward accepted this amendment, and the motion as amended was seconded and carried.

There appearing no further business the Society adjourned.

HENRY L. K. SHAW, *Secretary*.

WILLIAM H. MURRAY, *President*.

THE ALBANY MEDICAL COLLEGE ALUMNI ASSOCIATION OF CENTRAL NEW YORK.—At the meeting of this Association held at Fulton, Oswego county, on September 30th, the following officers were elected: President, Dr. W. Clinton Kellogg (1884), Syracuse; vice-presidents, Dr. Richard F. Stevens (1841), Lysander; Dr. Charles J. Bacon (1865), Fulton; Dr. Sylvester D. Lewis (1866), Syracuse; Dr. William C. Fawdrey (1885), Lorraine; Dr. Charles B. Tefft (1864), Utica; Dr. Charles Bernstein (1894), Rome; secretary, Dr. Frederic H. Brewer (1878), Utica; treasurer, Dr. Merritt B. Fairchild (1868), Syracuse. The banquet of the Association was thoroughly enjoyed. The next meeting will be held in Syracuse on the last Wednesday in September, 1902, when it is expected that Dr. Stevens, of Lysander, will read an original poem. Dr. Stevens graduated with the class of 1841. Dr. Bacon, of Fulton, who is eighty-six years of age, was also present at the meeting.

ALBANY MEDICAL COLLEGE.—The schedule of the mid-winter examinations, 1901-1902, has been issued as follows: Monday, December 16—9 A. M., Anatomy, and of Nervous System, 2d year; 11 A. M., Physiology, 1st year; 4 P. M., Obstetrics, 3d year; 8 P. M., Practice, 4th year. Tuesday, December 17—9 A. M., Therapeutics and Practice, 2d year; 11 A. M., Inorganic Chemistry, 1st year; 4 P. M., Surgery, 3d year; 8 P. M.,

Obstetrics, 4th year. Wednesday, December 18—9 A. M., Nervous Diseases, Insanity and Medical Jurisprudence, 4th year; 11 A. M., Pathology and Bacteriology, 2d year (Bender Laboratory); 4 P. M., Practice and Nervous Diseases, 3d year; 8 P. M., Surgery, 4th year. Thursday, December 19—9 A. M., Materia Medica, 1st year; 11 A. M., Clinical Microscopy, 3d year; 4 P. M., Physiology, 2d year; 8 P. M., Eye and Ear, Throat and Nose, and Skin, 4th year. Friday, December 20—9 A. M., Anatomy and Histology, 1st year (Bender Laboratory); 11 A. M., Therapeutics, 3d year; 3 P. M., Organic Chemistry, 2d year.

ALBANY GUILD FOR THE CARE OF THE SICK POOR; STATISTICS FOR OCTOBER.—Number of new cases, 75. *Classification of cases:* Dispensary cases receiving home care, 5; district cases, 8; other charity cases, 47; total number of charity cases, 60; moderate income cases, 15. *Classification of diseases:* Medical, 25; surgical, 15; gynæcological, 30; dental, 5. This general classification includes 14 obstetrical cases and 14 cases throat and nose. Number of contagious cases in above list: Medical, 17; surgical, 1. Removed to hospital, 2; died, 2. *Visits of the Guild Nurses:* Number of visits with nursing treatment, 742; for professional supervision of convalescents, 214; total number of visits in October, 955. Cases were reported to the Guild by the city physician, by 2 of the health physicians and by 20 other physicians; dentists, 3.

Special Obstetrical Department: Number of patients in October, 3; source, Dr. Stevenson, health physician; obstetrician, Dr. H. Judson Lipes; number of calls, 17; students in attendance, 3; number of calls, 20; one nurse in charge; number of visits, 40.

THE ALBANY HOSPITAL TRAINING SCHOOL FOR NURSES.—The fifth annual meeting of the Board of Patronesses of the Albany Hospital Training School for Nurses was held at the Governors' room in the Hospital, on Monday, November 4th, at 3 P. M. Mrs. William L. Learned, president of the board, occupied the chair. After the reading of the minutes of the last annual meeting by the secretary, Mrs. Luther H. Tucker, the financial report was read by Mrs. Edward G. Selden as follows:

Treasurer's report from November 1, 1900, to November 1, 1901: *Receipts*—From hospital allowance, \$420 monthly, \$5,040; patronesses' annual dues, \$1,220; private nursing, \$3,861.30; six patronesses' entrance fees, \$600; portrait show, \$800.50; Mrs. R. C. Pruyn for diet mistress' salary, \$600; collected by Mrs. Ward towards salary of assistant superintendent, \$175; proceeds of French play by M'lle Walthers, \$100; Mrs. Patterson towards renovating nurses' parlor, \$53; annual subscription, Mrs. G. Y. Lansing, \$20; from Miss Lusk, of Coxsackie, \$10; total, \$12,479.81. *Disbursements*—For salaries, wages and training expenses, \$9,138.33; furnishing new rooms and repairs to Nurses' home, \$813.74; repairs and addition to hospital by portrait show fund, \$507.38; diplomas and graduating exercises, \$21.25; renovating nurses' parlors, \$150; printing for secretary, \$2; total, \$10,632.70; balance, \$1,847.11.

The report of the superintendent of nurses, Miss MacDonnell, showed

that the nursing staff consisted of: Graduate nurses, 5; pupils, 56; probationers, 4; instructor of dietetics, 1; a total of 66.

The instructor in the diet kitchen also gave an interesting report of the work done in her department. The aim has been to teach the cooking of foods suitable for invalids and persons of weak digestive power. The work of the Hospital Aid Society has been distinctly satisfactory. The number of articles collected and handed over to the superintendent for the use of the hospital is 1,574. This includes several large and expensive articles, rolling chairs, Morris chairs, litter for the transportation of the patients from the ambulance to the wards.

In the course of remarks made by Mrs. Learned, the president, thanks were returned to those of the board who have so faithfully given of their time for the committee work, nurses' amusement, Christmas celebration, ward hospital visits, *et cetera*, and for the many luxuries and useful articles given by them for the use of the patients.

THE NEW YORK STATE DEPARTMENT OF HEALTH; SEPTEMBER BULLETIN. —In the *Bulletin* for September a report of the recent meeting of sanitary officers was given, from which the following is quoted:

The Conference of Sanitary Officers which was held in Albany, October 24th and 25th, was in every way satisfactory and successful. It was well attended, represented very completely all sections of the State, and was composed of a body of representative men.

At the opening session a paper was presented by ROBERT C. TAYLOR, Esq., of the New York bar, on certain legal relations of local boards of health. He sketched at length the early years of the work of the State Board of Health, beginning twenty years ago, prior to which there were no State and but few local organizations, the development of which latter comprised its first work, and toward which it has since stood as an Alma Mater. Almost all of the fifteen hundred local boards have been kept in organization, leaflets for their information prepared and the general management of sanitary work supervised through them and by work outside of their jurisdiction. The legal relations of nuisances and the powers and limitations of health boards, the duties of health officers, the matter of trespass, matters outside of territorial jurisdiction and cognate topics were discussed and illustrated by cases which have come before the courts for review. By reference to these he showed the kind of cases which come within the province of health boards for action. There was much discussion and many questions were propounded, of legal character, for answer.

Dr. HERMAN M. BIGGS, of the Health Department of New York city, read a paper on Tuberculosis and the attitude of health officers toward it. His chief contention was that we should minimize now all but the personal factor in its propagation. Too much has been said of it is a contagious disease, to which category scarlet fever, smallpox, typhus fever and measles belong; contagion is not a word to use in connection with tuberculosis; it is not communicable by proximity to the subject. The ejected sputum is the medium of its propagation and this we should lay

emphasis on and educate the people to. Koch, he believes correct, and experiments towards infecting cows with human tuberculosis conducted by his department have proved negative. The infection by tuberculous milk and meat may be ignored for the purpose of emphasizing the prominent factor and securing control of the sputum, the disinfection of premises occupied by consumptives, the early diagnosis by sputum examinations, and the education of the people along this line.

A description of the new serum laboratory, which is near completion, was made by the director, Dr. H. D. PEASE. The object mainly of this is to supply antitoxin freely, chiefly that poor people may be able to use it abundantly.

Dr. GEORGE BLUMER, director, spoke of the work of the bureau of bacteriology and pathology and gave suggestions for those availing themselves of it. 'Do not rely,' he said, 'on single samples of tuberculosis of diphtheria matter, but send others at intervals of a few days. Water samples should be sent as soon as collected; the typhoid bacillus analysis for which it is generally sent, is not directly found, but is only inferred by the presence of other intestinal bacilli. For the Widal test collect a drop of blood on each end of a microscopic slide and send it dry without laying on a cover glass.'

Mr. WM. J. PHILLIPS spoke of the new regulations for transportation of dead bodies; the forms for this will be given in the next *Bulletin*.

Dr. F. C. CURTIS gave certain essential data for the diagnosis of infectious exanthemata.

Prof. WALTER F. WILCOX, of the U. S. Census office, gave an outline of some essentials of a Registration System. The death rate is the measure of the health of a community; its correctness is not to be accepted when below an incredible ratio; the conclusions of the census office are that records largely fall short of accuracy, and there is consequent need of more exacting work in this direction by local boards of health.

Dr. ERNEST WENDE, health commissioner of Buffalo, spoke on milk in its relation to sanitation and the need of its control by supervision of buildings, water supply, food, means of transportation, and should include the prohibition of preservatives and adulterations, the inspection of animals and a State and municipal system of licenses and penalties.

Dr. P. A. CALLAN, of New York, spoke on the testing the eyes of school children.

Prof. OLIN H. LANDRETH, School of Engineering, outlined the subject of sewage disposal for villages as to measures at present desirable, and some of the legal bearing on the matter; and it was further detailed by J. J. R. Cross, C. E., president of the American Society of Civil Engineers.

STATE CIVIL SERVICE EXAMINATIONS FOR PHYSICIANS.—The chief examiner of the State Civil Service Commission announces that there will be held an open competitive examination at Albany and at a number of other cities of the State for positions in New York State and county departments and institutions on December 7, 1901, for the following positions: Assistant, Antitoxin Laboratory, department of health, \$720, open

to women only; Assistant Bacteriologist, department of health, \$500, for half time, open to licensed physicians only; Director of Pathological Institute, State commission of lunacy, \$5,000, open to non-residents subject to the provisions of regulation X; Physician, third grade (including Junior Physician), State hospitals, usual salary \$900 and maintenance, open to licensed practitioners who have had at least one year's hospital experience.

THE MEDICAL CRITIC; A NEW JOURNAL.—Under the editorship of Dr. M. W. Curran, the initial number of *The Medical Critic* made its appearance in November, 1901. The object of the creation of another medical journal, as stated in the editorials, is that "We believe that our magazine, the contents of which, each month, will range over the entire field of medicine, is particularly needed just now. Prepared by a staff of editors, each one having entire charge of the subject connected with their specialty, and aiming to provide the general practitioner and specialist with the current news, advances in science and reviews of all important articles published each month, thus enabling the reader to dispense with a number of special journals, which he must now obtain to secure information along particular lines, and, when in addition we add that we will present to each subscriber an annual or semi-annual 'Index Medicus,' which will be a complete summary of all foreign and domestic literature, we think that the reasons for our existence are sufficiently numerous to merit your cordial co-operation."

This new journal will evidently be of great value to the general practitioner. The policy of the journal, that "scientific interest control the business management of this journal," is a good one.

THE AMERICAN JOURNAL OF THE MEDICAL SCIENCES; EXTRA EDITION.—This enterprising journal issued a special extra edition containing the official report of the case of President William McKinley, on October 19, 1901. Beginning with the November number of this journal, the space accorded to Original Communications will be permanently doubled. This increase in size will render it possible to present a number of features which will greatly augment the practical value of the journal to its readers.

NEW YORK SKIN AND CANCER HOSPITAL; LECTURES BY DR. BULKLEY.—The governors of the New York Skin and Cancer Hospital, located on Second avenue, corner of 19th street, announce that Dr. L. Duncan Bulkley will give a fourth series of clinical lectures on diseases of the skin, in the out-patient hall of the hospital, on Wednesday afternoons at 4:15 o'clock. This course is free to the medical profession.

PERSONAL.—Dr. A. JACOBI has removed from 110 W. 34th street, New York, to 19 E. 47th street.

—Dr. RENNELAER J. SMITH and family are now located in San Bernardino county, California, near Redlands.

Dr. HARRY F. HULL (A. M. C. '99), has located at Proctorville, Vermont.

—Dr. W. W. BETTS (A. M. C. '83), is at 314 Wilcox building, Los Angeles, California.

Book Reviews

A Syllabus of a Course of Lectures on the Diseases of the Nervous System.

Designed as a Note-Book for the Use of Students. By HENRY HUN, Professor of Diseases of the Nervous System in the Albany Medical College. In Two Volumes. Vol I: Diseases of the Nerves, Spinal Cord and Brain Stem. Illustrated.

This syllabus comprises an outline of all the didactic lectures on the diseases of the nervous system delivered in the Albany Medical College on Monday mornings throughout the college year. It also includes the first two clinics (lectures 3 and 5) of the neurological clinics held on Friday afternoons throughout the year and the first two clinics (lectures 3 and 4) of the course on general medicine held on Wednesday mornings throughout the college year.

The graduates of the Albany Medical College, who were fortunate enough to have had the pleasure of listening to the very interesting and instructive lectures on diseases of the nervous system, delivered by Dr. Hun, and to have attended his neurological clinics at St. Peter's and the Albany hospitals, where his didactic lectures were fully illustrated by numerous clinical cases, will appreciate and realize the great value of this work to the medical student eager after the truths in regard to the pathology, diagnosis and treatment of nervous diseases. While these volumes have been designated a syllabus on the pathology, diagnosis and treatment of nervous diseases, the student who makes good use of them will at the end of his college career find that he has a valuable hand-book on diseases of the nervous system, embracing, as it will, the author's wide experience, together with all that is good in literature. Volume one consists of 282 pages, and thirty-two illustrations, one of which is colored. This volume comprises the author's twenty-nine lectures on the peripheral nerves, spinal cord, medulla and brain stem. The first five lectures are devoted to an introduction to the study of the pathology of nervous diseases and the general definition of terms, as well as the methods of case taking in general medicine and the special method of history record in the study of nervous diseases. The author's methods of case recording, both for general diseases and those of the nervous system, are very thorough and exact, and if properly mastered and used will be of inestimable value to the student in training him to observe the various manifestations of disease and to associate them into clinical groups for diagnosis. The next five lectures are concerned with the study of the pathology, symptomatology and treatment of diseases of the peripheral nerves. They are divided into injuries to the nerves, the various forms of peripheral neuritis and all varieties of neuralgia.

Lectures eleven to twenty-six inclusive, take up seriatim, the diseases and injuries to the vertebræ, meninges and spinal cord, including spinal localization. They are illustrated by well-chosen cuts indicating, as they do, the pathological changes incident to the systemic and random diseases of the spinal cord and emphasize to the student the need of a thorough

knowledge of the anatomy of these parts as an introduction to the study of their diseases.

Lectures twenty-seven and twenty-eight are devoted entirely to the study of the diseases of the medulla oblongata and brain stem, and twenty-nine deals entirely with the localization of lesions in the brain stem. These areas, besides containing many independent centres, are so intimately associated by afferent and efferent tracts with the spinal cord that they must necessarily take part in the pathological changes incident to diseases of the spinal cord, hence the author has devoted part of his first lecture in explanation of that fact.

While it is not uncommon to find teachers in the primary department of medicine publishing for the benefit of their students, a synopsis of their regular course of lectures, this is one of the few instances known to the reviewer, where a synopsis of a department of clinical medicine has been so elaborated. That it has been well done can not be gainsaid, and it should be a stimulus to others working in any of the various departments of clinical medicine to follow the author's example. HERMON C. GORDINIER.

Transactions of the Medical Society of the State of New York for the Year 1901. Published by the Society, 1901.

The volume of transactions for 1901 is of the same excellent character as of previous years. The work of compiling such a report is certainly enormous, but it has been well done. Of special interest is the anniversary address on the "Radical Cure of Inguinal Hernia," by Dr. A. M. Phelps, of New York. Two important papers were omitted from the report because of the failure of the authors to send them in time,—“An X-Ray Study of the Causes of Disability Following Fractures Involving the Elbow-Joint,” by Dr. Samuel Lloyd, of New York, and one by Dr. Willy Meyer, of New York, on “The Treatment of Persistent Suprapubic Vesical Fistula by Means of Bottini's Operation.”

Materia Medica Pharmacy, Pharmacology and Therapeutics. By W. HALE WHITE, M. D., F. R. C. P.; Physician to and Lecturer on Medicine at Guy's Hospital, London; Author of a Text-Book of General Therapeutics. Edited by REYNOLD W. WILCOX, M. A., M. D., LL. D.; Professor of Medicine and Therapeutics at the New York Post-Graduate Medical School and Attending Physician to the Hospital; Visiting Physician to St. Mark's Hospital; President of the American Therapeutic Society; Fellow of the American Academy of Medicine, etc. Fifth American Edition, Thoroughly Revised. Published by P. Blakiston's Son & Co., 1012 Walnut St., Philadelphia. 1901. Price, \$3.00 net.

That a fifth American edition of this work should appear in so short a time speaks well for its popularity among teachers as well as among students. Although carefully condensed, this edition is forty pages larger than its predecessor. The chapters on “Organic Extracts” and on “Antitoxins and Serums” are brief but well-written and thoroughly up to date.

Most of the unofficial preparations used at the present time are also considered. The editor's additions and corrections are copious, and add largely to the value of the work. The book is certainly a model of its kind and is equally available for the student or the experienced physician.

The Physicians' Visiting List for 1902. P. Blakiston's Son & Co., Philadelphia. 1901.

The fifty-first edition of this useful visiting list is of the usual excellence.

Current Medical Literature

NEUROLOGY

Edited by Henry Hun, M. D.

A Case of Profound Aphasia and Mental Confusion Cured by Trephining and Evacuation of a Large Hæmorrhagic Cerebral Cyst.

J. L. STEVEN and J. LUKE. *Glasgow Medical Journal*, September, 1900.

The authors consider the case worthy of record, on account of the completeness of the recovery following the operation, and because of the clear indications for operation which developed during the progress of the case. Patient, a mason, aet. thirty-six, was admitted to the Glasgow Royal Infirmary, with most profound aphasia, which was accompanied by an incomplete paralysis of the right arm, associated with some rigidity of the fingers. The aphasia was not only motor, but sensory as well, the patient being clearly word-blind, if not also word-deaf. There were no certain indications regarding the nature of the lesion causing the speech disorder, although on the whole the phenomena suggested the presence of hæmorrhage. Disease of the heart, kidney trouble and syphilis could be excluded, and the patient was at first treated as though suffering from the effects of cerebral hæmorrhage. The attempt to relieve the patient by trephining over the left motor area, was indicated by the sudden and definite development of convulsive spasms, limited to the right side of the face. A large hæmorrhage cyst, situated in or over the left cerebral hemisphere, was exposed and evacuated. A few days after the operation the patient recovered the power of speech and the use of the arm. The history of the case before operation was as follows: Patient had enjoyed good health until the onset of the illness for which he was sent to the hospital. A week before his admission to the hospital he returned home from work, complaining of feeling tired, and went to bed without taking any food. The next morning his wife noticed that she could not understand what he was saying, and also that he was paralyzed on the right side. After his admission to the hospital, in addition to the facial convulsions he had a number of epileptic seizures, and positive word blindness developed. The conclusion was arrived at that the lesion involved a wide area of the surface of the left cerebral hemisphere. The presence of the word blind-

ness indicated that the lesion was not confined to the neighborhood of Broca's lobe. The rigidity of the fingers of the right hand suggested a cortical situation of the lesion, and the development of Jacksonian epilepsy left no doubt on the point. Patient was seen six months after leaving the hospital, and had remained quite well as regards his speech and the power of the right arm and leg. Patient stated that during the entire time he was in the hospital he had no proper consciousness of where he was, nor of whom the people were around him. He had a vague remembrance of thinking that he was at school learning lessons, so that in all probability he was not only word blind but word deaf.

Hysterical Astasia-Abasia. (Astasie-abasie hysterique.)

DR. TERRIEN. *Le Progrès Médical*, November 17, 1900.

This article reports a case of a man, thirty-eight years old, a gardener who, for four years, had considered himself, and been regarded by his associates, as incapable of walking. His forearms were paralyzed, but only as to motion, not as to sensation. It was hysterical paresis. The patellar reflexes were so exaggerated that when Dr. Terrien first saw the patient that fact made him hesitate to diagnose hysteria, though all other symptoms indicated that malady. It was repeatedly tested and proved to be a genuine reflex, not merely tendinous or psychic. The author goes over the ground of differential diagnosis and shows that his final diagnosis could be made by exclusion. The treatment consisted in hypnosis, with post-hypnotic suggestion that he could walk. The patient walked, during hypnosis and thereafter, nor failed to walk at any time. Having forgotten, during the first hypnosis, the paresis of the upper extremities, Dr. Terrien at once, after having proved that the patient could walk when first aroused from hypnosis, hypnotized him a second time; then the patient was told to grasp the doctor's hand vigorously, which was done; the suggestion that he could use his hands for ordinary purposes was also made. All this was realized post-hypnotically. The article is long, but all of it pertinent and fair. A half of it is devoted to general consideration of psychotherapeutics, as applied to cases of the kind with the one whose history is given in it. The author says that it is proper to employ hypnosis when there is doubt as to the kind of a paralytic affection; that he has often used suggestion in such cases in order to get clear ideas of the nature of the disease. The article concludes by submitting the case reported to adversaries of psychotherapeutics, "if there are any."

PAEDIATRICS

Edited by Harry L. K. Shaw, M. D.

Intestinal Cancer in Childhood. (Der Darmkrebs im Kindesalter.)

ZUPPER. *Wiener klinische Wochenschrift*, No. 17, 1900.

The writer gives a careful review of the literature and reports a case. A girl of twelve years of age was brought to the hospital complaining of

colic and sharp pain on movement of the bowels. The child was perfectly well until three months before. Blood had been observed in the stools and the pain attending defecation had been intense. The father and mother were healthy and there was no history of cancer in the family. The child was well nourished and developed. Appetite good. Heart and lungs normal. Physical examination of the abdomen was negative as was a digital examination of the rectum. A small anal fissure was detected which yielded readily to treatment. A short time before the child died a tumor was palpable in the left hypogastrium. The autopsy disclosed an ulcerative carcinoma of the sigmoid flexure with stricture. There were metastatic growths on the liver, peritoneum, omentum and retroperitoneal lymph glands. The microscopical examination of the growth showed a typical cylinder cell carcinoma. From a large number of statistics he concludes that out of one thousand cases of carcinoma there will be one in childhood. The favorite location in children is in the intestinal tract and the writer gives a brief epitome of ten authenticated cases besides his own. Of these one involved the small intestine and ten the colon. It is interesting to note that in sarcoma in children there is seldom any involvement of the large intestine. Most of the cases occurred shortly before puberty and were more frequent in boys. The symptomatology is vague. A well marked cachexia is never present. A more or less anæmic condition may ensue but the child can remain well nourished until the end and the true condition be not recognized until the autopsy. The local symptoms as a rule appear only a short time before death. Carcinoma appears to find in the youthful organism conditions favorable for rapid growth. Nothnagel has reckoned that the prognosis in adults without operative help is from one-half to two years. Zuppinger places one-half year as the extreme limit in children. Czerny has operated twice in children for rectal carcinoma and in one case there was a relapse in less than four months. Operative procedure is not recommended on account of the metastasis which occurs so readily in children.

Floating Kidneys and Kidney Palpation in Infancy. (Ueber Wanderniere und die Tastbarkeit der Nieren im Säuglingsalter.)

KNOEPFELMACHER. *Jahrbuch für Kinderheilkunde*, March 1, 1901.

The author gives the histories and autopsies of two cases of movable kidney in which the condition was diagnosed during life. In one case both kidneys were movable, and there was great movement of the liver and spleen. In the second case the left kidney only was movable.

Abdominal palpation in infants is extremely difficult and the author prefers to palpate the kidneys through the rectum, and finds this method very satisfactory in young infants. He inserts one finger and follows the course of the sigmoid flexure, and is able in most cases to feel both kidneys. The kidneys in infants are relatively larger than in adults, so it is not at all difficult to reach the lower segment, and the extent of the excursions is not hard to trace.

Feeding Infants on Undiluted Cow's Milk. (Ueber Säuglingsernahrung mit Vollmilch.)

SCHLESINGER. *Berliner klinische Wochenschrift*. No. 7, 1901.

A perfect infant diet must fulfill the following conditions: It must contain all the organic and inorganic food elements which are necessary for the growth and maintenance of the body; it must be easily assimilable, and must contain necessary and sufficient nourishment. The writer claims that modified and diluted milk does not fulfill the above requirements. The calorie contents of undiluted cow's milk and of breast milk are almost identical and for this reason the more the milk is diluted the less is its food value. According to the author, the employment of water to dilute the milk does not render it any more digestible. The water soon passes into the intestines and leaves the milk in the stomach in the same condition as if it had been taken undiluted. To nourish the child properly, large quantities of the various mixtures have to be given, and this dilates the stomach and weakens its motor activity so that dyspepsia and its attendant evils are produced. The intestinal glands are weakened, and the secretions become less and less. The author thinks that the orthodox method of so-called modification is responsible for many cases of marasmus. The author's use of full milk makes artificial infant feeding a very simple matter, and it is by all means the cheapest method. He advises smaller amounts at each feeding and longer intervals, and claims that the more general employment of undiluted cow's milk would greatly reduce infant mortality.

On the Prophylactic Immunisation of Sick Children against Diphtheria. (Ueber die prophylactische Immunisirung kranker Kinder gegen Diphtherie.)

HUGO KRAUS. *Prager medicinische Wochenschrift*, Nos. 19 and 20, 1900.

There was a great increase in the number of infectious disease cases admitted to Ganghofner's clinic in Prague during the winter months of 1898 and 1899. Owing to the crowded condition cases of mixed infection—scarlet fever and diphtheria—were placed in the scarlet fever pavilion. The same thing was done in the measles pavilion. In order to prevent the disease from spreading all the children in these buildings were given prophylactic injections of antitoxin. Forty-four children were immunised in the scarlet fever division, the majority of whom were very sick. Two of these immunised children developed diphtheria. Both recovered. One had received a bad burn from hot water before the injection and the diphtheritic membrane appeared on this raw surface. The other had the nasal form and there was no involvement of the throat. These cases developed twenty-six and twenty-seven days respectively after the inoculation. Twelve cases of combined measles and diphtheria were admitted in the measles division. All the straight measles cases were immunized. Out of forty-seven such injections only one child contracted the disease. This developed on the forty-first day after the injection.

Thirty-one cases were admitted to the diphtheria pavilion as suspected diphtheria who did not have the disease. They were all immunised and not one contracted diphtheria although constantly exposed to the contagion. The result showed that out of one hundred and twenty-two exposed children who were given prophylactic injections of antitoxin, three developed the disease.

All of these children were sick and some had very severe attacks of measles or scarlet fever. An insignificant serum exanthem in four cases was the only unpleasant after effect. The author is strongly convinced that we are able by means of antitoxin to render immune against diphtheritic infection not only the healthy but also the sick.

Clinical Forms of Tuberculosis in Young Children. (Formes clinique de la tuberculose du premier age.)

Moussous. *Archives de médecine des Enfants*, February, 1901.

The multiplicity of clinical forms observed in older children and adults do not exist in the first three years of life. The generalized form results from the tendency of local tubercular lesions to spread. These may be either hereditary or acquired. The author could find only seven cases in the literature where the baby was born with signs of tuberculosis. He believes in an inherited disposition or tendency when the child of tubercular parents comes into the world in a state of congenital debility, and is in the midst of tubercular contagion from the parents. The point of entry of the infection is either through the skin, pharynx, intestines or lungs. It is impossible to determine the exact moment of infection so that the period of latency is unknown. The author distinguishes two clinical types. Chronic generalized tuberculosis (*tuberculose généralisée chronique*) is the most frequent and characteristic form. The period of invasion is variable, and is commonly marked by a bronchitis or broncho-pneumonia, and not infrequently by gastro-intestinal disturbance. Convalescence from these disorders is slow and merges into a later stage (*period d'état*) where the characteristic cachexia develops. Three symptoms are of great importance, hypertrophy of the spleen, liver and a general hyperplasia of the peripheral lymph glands. This form is *apyretic*. The second type he calls acute generalized tuberculosis (*tuberculose généralisée aiguë*). Here there are fever, diarrhoea, prominent abdomen, enlarged spleen, some pulmonary signs with rapid emaciation co-incident with fever or cerebral symptoms with rapid death. This form is rapid in its course, and is attended with fever. Meningitis is one of the terminations which may occur either in the form of hemiplegia or a convulsion. The author lays much stress on the presence of polyadenitis in these cases. The examination of the blood and detection of indican in the urine have little diagnostic value. It is most apt to be mistaken for gastro-intestinal cachexia, syphilitic cachexia, pseudo-leucæmic anæmia, typhoid fever and acute gastro-enteritis. The author recommends the tuberculin test and the tubercular serum reaction of Arloing and Courmont in doubtful cases.

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